XR-C5100R/C5103R

SERVICE MANUAL

AEP Model
UK Model
XR-C5100R
East European Model
XR-C5103R

Photo: XR-C5103R

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-25G-136

SPECIFICATIONS

Cassette player section

Tape track	4-track 2-channel stereo	
Wow and flutter	0.08 % (WRMS)	
Frequency response	30 – 18,000 Hz	
Signal-to-noise ratio	TYPE II, IV	61 dB
	TYPE I	58 dB

Tuner section

FM

Tuning range	87.5 – 108.0 MHz (XR-C5100R) FM1, FM2: 87.5 – 108.0 MHz FM3: 65.0 – 74.0 MHz (XR-C5103R)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono) (XR-C5100R) 63 dB (stereo), 65 dB (mono) (XR-C5103R)
Harmonic distortion at 1 kHz	0.5 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 281 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.71 MHz/450 kHz
Sensitivity	MW: 30 µV LW: 50 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	40 W × 4 (at 4 ohms)

General

Outputs	Telephone ATT control lead Power amplifier control lead Rear line out (1)
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 188 × 53 × 181 mm (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 164 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Rotary commander RM-X4S Front panel case (1)

Design and specifications are subject to change without notice.

FM/MW/LW CASSETTE CAR STEREO

MICROFILM

SONY®

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Flexible Circuit Board Repairing

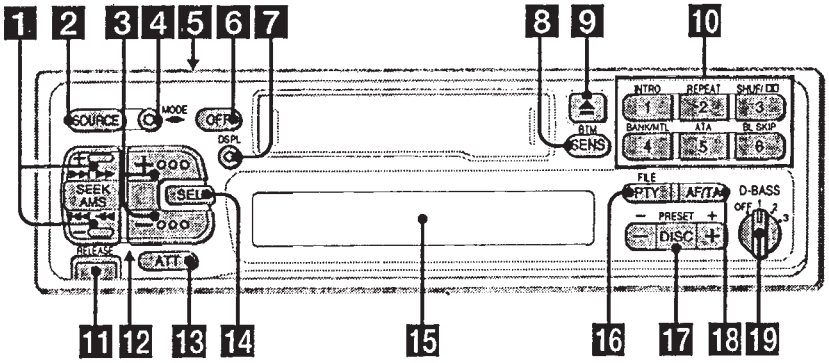
- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

This section is extracted from instruction manual.

Location of controls



Refer to the pages for further details.

EN

1 SEEK/AMS button 5, 6, 7, 8, 9, 11, 14, 15, 17

2 SOURCE button (TAPE/TUNER/CD/MD) 5, 7, 14, 16

3 ⊕⊖ (volume/bass/treble/left-right/front-rear control) button 5, 13, 16

4 MODE (◄I►) button
During Tuner reception:
BAND select 7

During Tape playback:
Transport direction change 5

During CD/MD playback:
Unit select 14

5 POWER SELECT switch (located on the top of the unit)
See "POWER SELECT Switch" in the Installation/Connections manual.

6 OFF button 4, 5

7 DSPL (display mode change/time set) button 5, 6, 8, 14, 16

8 SENS/BTM (sensitivity adjust/Best tuning memory function) button 7, 8, 10

9 ⏏ (eject) button 5

10 During radio reception:
Preset number buttons 7

During tape/CD/MD playback:
① INTRO button 6, 15
② REPEAT button 6, 15
③ SHUF (Shuffle) button 15
④ MTL button 6
⑤ ATA (Automatic Tuner Activation) button 6
⑥ BL SKIP (Blank Skip) button 6

11 RELEASE (front panel release) button 4, 18

12 Reset button (located on the front side of the unit hidden by the front panel) 4
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.

13 ATT button 13

14 SEL (control mode select) button 5, 10, 11, 13, 14, 16, 17

15 Display window

16 PTY (programme type) button 11

17 PRESET/DISC button 7, 15
During Tuner reception:
Preset stations select 7

During CD/MD playback:
Disc change 15

18 AF/TA (alternative frequency/traffic announcement) button 9, 10

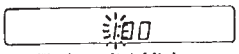
19 D-BASS control 13

Setting the clock

The clock has a 24-hour digital indication.
For example, setting it to 10:08

1 Press (OFF) or (DSPL) during operation.

2 Press (DSPL) for two seconds.



The hour digit blinks.

❶ Set the hour digits.

to go forward
to go backward

❷ Press (SEL) momentarily.

The minute digit blinks.

❸ Set the minute digits.

to go forward
to go backward

3 Press (DSPL) momentarily.

The clock activates.

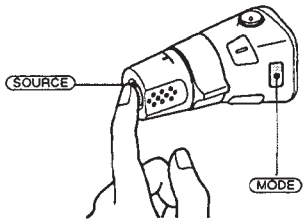
Note
If the POWER SELECT switch on the top of the unit is set to the Ⓑ position, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio.

Other Functions

Using the rotary commander

The rotary commander works by pressing buttons and/or rotating controls.
You can control the optional CD/MD unit by the rotary commander.

By pressing buttons (the SOURCE and the MODE buttons)



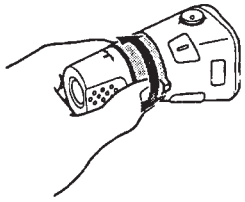
Every time you press (SOURCE), the source changes as follows:

TAPE → TUNER → CD → MD

Pressing (MODE) changes the operation in the following ways:
- *the tape transport.*
- *the band, FM1 → FM2 → FM3 → MW → LW.*
- *the CD/MD unit.*

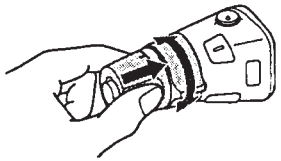
Tip
You can turn on this unit by pressing (SOURCE) on the rotary commander.

By rotating the control (the SEEK/AMS control)



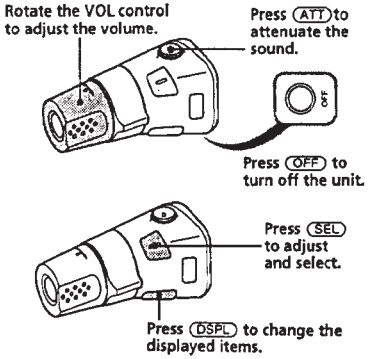
Rotate the control momentarily and release it to:
- Locate the beginnings of the tracks on the tape. Rotate and hold the control, and release it to fast-wind the tape. To playback, rotate and hold the control again, and release it.
- Locate a specific track on a disc. Rotate and hold the control until you locate the specific point in a track, then release it to start playback.
- Tune in the stations automatically. Rotate and hold the control to tune in the specific station.

By rotating the control while pushing in (the PRESET/DISC control)



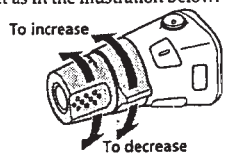
Push in and rotate the control to:
- Receive the stations memorized on the preset buttons.
- Change the disc.

Other operations

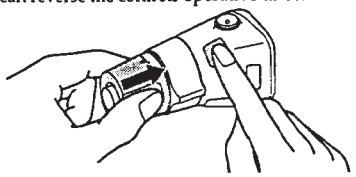

Rotate the VOL control to adjust the volume.
Press (ATT) to attenuate the sound.
Press (OFF) to turn off the unit.
Press (SEL) to adjust and select.
Press (DSPL) to change the displayed items.

Changing the operative direction

The operative direction of controls is factory preset as in the illustration below.



If you need to mount the rotary commander on the right side of the steering column, you can reverse the controls operative direction.



Press (SEL) for two seconds while pushing in the VOL control.

Adjusting the sound characteristics

1 Select the item you want to adjust by pressing (SEL) repeatedly.
VOL (volume) → BAS (bass) → TRE (treble) → BAL (left-right) → FAD (front-rear)

2 Adjust the selected item by pressing either (+) or (−).

Adjust within three seconds after selecting. (After three seconds the button will again serve as the volume control button.)

Attenuating the sound

Press (ATT).
The "ATT" indication flashes.

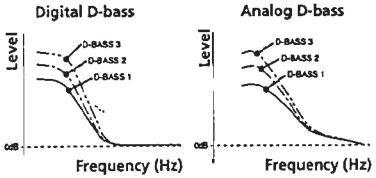
To restore the previous volume level, press again.

Tip
The unit decreases the volume automatically when a telephone call comes in (Telephone-ATT function).

Changing the sound and beep tone

Boosting the bass sound — D-bass

You can enjoy clear and powerful bass sound. The D-bass function boosts the low frequency signal with a sharper curve than conventional bass boost.
You can hear the bass line more clearly even if the vocal volume remains the same. You can emphasize and adjust the bass sound easily with the D-BASS control. This effect is similar to the one you get when you use an optional subwoofer system.
Moreover, the Digital D-bass* function creates even sharper and more powerful bass sounds than Analog D-bass.



Adjusting the bass curve

Turn the D-BASS control to adjust the bass level (1, 2 or 3).
"D-BASS"* appears in the display.

To cancel, turn the control to the OFF position.

* *If the CD changer has the digital D-bass function, "DIGITAL D-BASS" appears on the display during CD playback.*

Note
If the bass sound becomes distorted, adjust the D-BASS control or volume button.

Attenuating the beep tone

Press (6) while pressing (SEL).
To obtain the beep tone again, press these buttons again.

Note
If you connect an optional power amplifier to the LINE OUT and do not use the built-in amplifier, the beep tone will be disabled.

Changing the illumination color

Press (1) while pressing (SEL).

You can choose the color between amber and green.

Installation

Precautions

- Do not tamper with the four holes on the upper surface of the unit. They are used for tuner adjustments to be made only by service technicians.
- Choose the installation location carefully so that the unit will not interfere with driving.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt, or excessive vibration.
- Use only the supplied mounting hardware for safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

How to Detach and Attach the Front Panel

Before installing the unit, detach the front panel.

To detach

Before detaching the front panel, be sure to turn the power off first. Then press the RELEASE button to open up the front panel, and detach the panel by pulling it towards you as illustrated.

To attach

Align parts Ⓐ and Ⓑ, and push the front panel in until it clicks.

Instalación

Precauciones

- No toque los cuatro orificios de la superficie superior de la unidad. Estos orificios son para ajustes del sintonizador que solamente deberán realizar técnicos de reparación.
- Elija cuidadosamente el lugar de montaje de forma que la unidad no interfiera las funciones normales de conducción.
- Evite instalar la unidad donde pueda quedar sometida a altas temperaturas, como a la luz solar directa o al aire de calefacción, o a polvo, suciedad, o vibraciones excesivas.
- Para realizar una instalación segura y firme, utilice solamente la ferretería de montaje suministrada.

Ajuste del ángulo de montaje

Ajuste el ángulo de montaje a menos de 20°.

Forma de extraer e instalar el panel frontal

Antes de instalar la unidad, extraiga el panel frontal.

Para extraerlo

Antes de extraer el panel frontal, cerciórese de desactivar primero la alimentación. Después presione la tecla RELEASE para abrir el panel frontal, y extraiga éste tirando de él hacia usted como se muestra en la ilustración.

Para instalarlo

Alinee las partes Ⓐ y Ⓑ, y presione el panel frontal hasta que chasquee.

Montering

Sökerhetsföreskrifter

- Låt de fyra hålen på bilstereons ovansida vara. De är till för radiojusteringar som endast får utföras av fackkunniga tekniker.
- Var noga när du väljer var i bilen du monterar bilstereon, så att den inte sitter i vägen när du kör.
- Montera inte bilstereon där den utsätts för värme, t ex solsken eller varmluft, eller där den utsätts för damm, smuts och/eller vibrationer.
- Använd endast de medföljande monteringstillbehören för att vara säker på att bilstereon monteras på ett säkert och korrekt sätt.

Tillåten monteringsvinkel

Monteringsvinkeln får inte vara större än 20 grader.

Ta loss/fästa frontpanelen

Ta loss frontpanelen innan du monterar bilstereon.

Ta loss frontpanelen

Kontrollera att du har slått av strömmen innan du tar loss panelen. Tryck därefter på RELEASE för att öppna frontpanelen. Ta loss frontpanelen genom att dra den utåt enligt illustrationen nedan:

Fästa frontpanelen

Lägg Ⓐ och Ⓑ mot varandra, kant i kant, och tryck tills du hör ett klickljud.

Instalação

Precauções

- Não altere indevidamente os quatro orifícios da superfície da parte superior do aparelho. Estes servem para regulações do sintonizador que devem ser efectuadas somente por técnicos qualificados.
- Escolha com cuidado um local apropriado para a montagem do aparelho, para que este não interfira com a condução do veículo.
- Evite instalar o aparelho onde possa estar sujeito a altas temperaturas, tais como em locais expostos directamente à luz do sol, ao ar quente dos aquecimentos, ou sujeitos a pó, sujidade ou vibração excessiva.
- Para efectuar uma instalação segura utilize unicamente o equipamento de montagem fornecido .

Ajuste do ângulo de montagem

Ajuste o ângulo de montagem para menos de 20°.

Para retirar e colocar o painel frontal

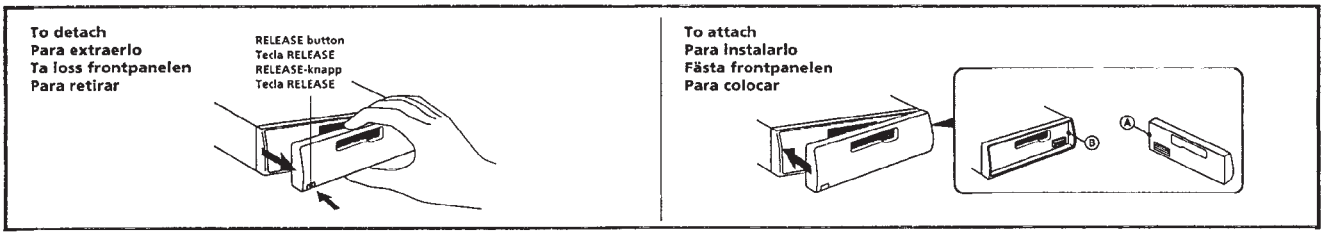
Retire o painel frontal antes de iniciar a instalação do aparelho.

Para retirar

Antes de retirar o painel frontal, desligue o aparelho. A seguir, carregue na tecla RELEASE para abrir o painel frontal e retire-o, puxando-o para fora como ilustrado.

Para colocar

Alinhe as partes Ⓐ e Ⓑ, e fixe o painel frontal pressionando-o até que encaixe.



Mounting Example

Installation in the dashboard

Ejemplo de montaje

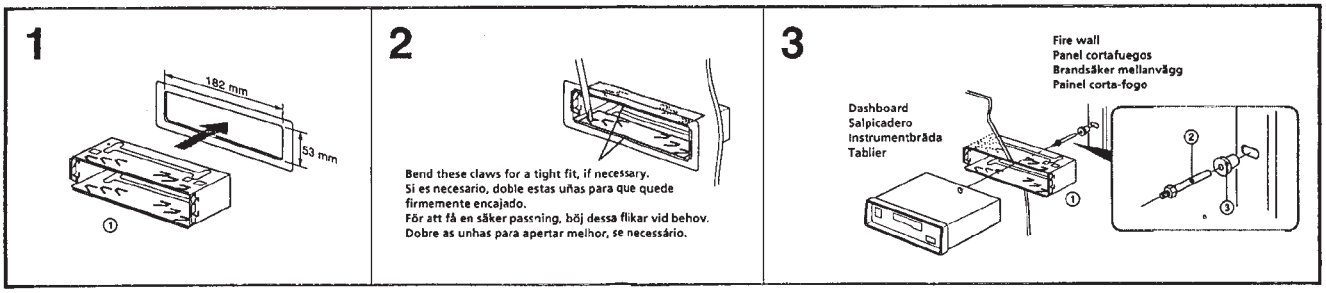
Instalación en el salpicadero

Exempel på montering

Montera på instrumentbrädan

Exemplo de montagem

Instalação no tablier



Note for Connecting

If there is alternator noise (a whining sound when raising engine speed), ground the master unit by connecting it to a metal point of the car with the supplied chassis ground cord ⑤. Connect the ground cord to the master unit with part ② as shown in the illustration.

Nota sobre conexión

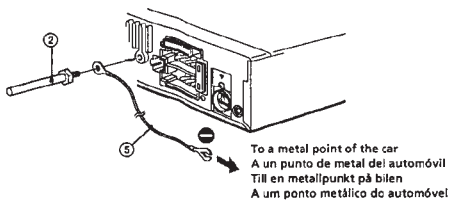
Si el alternador emite ruido (un zumbido al aumentar la velocidad del motor), conecte la unidad principal a tierra y, para ello, enchúfela a un punto de metal del automóvil mediante el cable de toma a tierra del chasis ⑤ suministrado. Conecte el cable de toma a tierra a la unidad principal con la pieza ② como se muestra en la ilustración.

Angående anslutningar

Om motorn ger störningar (ett vinande ljud när du gasar) bör du jorda huvudenheten till en metallpunkt på bilen med den medföljande chassijordkabeln ⑤. Anslut jordkabeln till huvudenheten med jordkontakten ② enligt bilden.

Nota sobre a ligação

Se o alternador começar a produzir ruídos (um som agudo durante o aumento da velocidade do motor), ligue a unidade principal à terra. Para tal, ligue o cabo de terra do chassi ⑤ fornecido a um ponto metálico do automóvel. Ligue o cabo de ligação à terra ao aparelho principal ②, como se mostra na ilustração.


②
⑤
To a metal point of the car
A un punto de metal del automóvil
Till en metallpunkt på bilen
A um ponto metálico do automóvel

Connections

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Connect the unit to the power supply of the car after all other connections are complete.
- **Run all ground wires to a common ground point.**
- Connect pin 4 or pin 7of the unit's power connector to a free car circuit rated higher than the unit's fuse rating. If you connect this unit in combination with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual components' fuse rating. If there are no car circuits rated as high as the unit's fuse rating, connect the unit directly to the battery. If your car provides no circuit specifically for an audio unit, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.

If Your Car has No Accessory Position on the Ignition Key Switch — POWER SELECT Switch

The illumination on the front panel is factory set to be turned on even while the unit is not in use. However, this setting may cause some car battery wear if your car has no accessory position on the ignition key switch. To avoid this battery wear, **set the POWER SELECT switch located on the top of the unit to the ⓫ position, then press the reset button.** The illumination is reset to stay off while the unit is not in use.

Note

The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the ⓫ position.

Reset Button

When the installation and connections are complete, be sure to press the reset button with a ballpoint pen etc.

Note on the control function

Pin 5 of the unit's power connector supplies + 12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation), AF (Alternative Frequency), or the TA (Traffic Announcement) Functions.

Memory hold connection

When pin 4 or pin 7 of the unit's power connector is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Conexiones

Precauciones

- Esta unidad ha sido diseñada para alimentarse con 12 V CC, negativo a masa, solamente.
- Conecte la unidad al suministro de alimentación del automóvil una vez realizadas todas las conexiones.
- **Conecte todos los conductores de puesta a masa a un punto común.**
- Conecte el terminal 4 o 7 del conector de alimentación de la unidad a un circuito libre del automóvil con una potencia nominal superior a la del fusible de la unidad. Si conecta ésta en combinación con otros componentes estéreo, la potencia nominal del circuito del automóvil al que se conecte debe ser superior a la suma de la de los fusibles de los componentes individuales. Si no hay ningún circuito en el automóvil con una potencia nominal tan alta como la del fusible de la unidad, conecte ésta directamente a la batería. Si no hay circuitos en el automóvil destinados específicamente a la conexión de unidades de audio, conecte la unidad, conéctela a un circuito del automóvil con una potencia nominal superior a la del fusible de la unidad, de forma que si dicho fusible se funde no se vean afectados otros circuitos.

Si el automóvil no dispone de posición para accesorios en la llave de encendido

— Selector POWER SELECT

La iluminación del panel frontal ha sido ajustada en fábrica para que esté activada aunque la unidad no se encuentre en reproducción. Sin embargo, este ajuste puede provocar cierta descarga de la batería del automóvil **si éste no dispone de posición para accesorios en la llave de encendido.** Para evitar esto, **ponga el selector POWER SELECT, situado en la parte superior de la unidad, en la posición ⓫ y, después, presione el botón de reposición.** La iluminación estará desactivada cuando la unidad no se encuentre en reproducción.

Nota

La alarma de precaución del panel frontal no se activará cuando el selector POWER SELECT se encuentre en la posición ⓫.

Botón de reposición

Cuando finalice la instalación y las conexiones, cerciórese de presionar el botón de reposición con un bolígrafo, etc.

Nota sobre la función de control

El terminal 5 del conector de alimentación de la unidad suministra + 12 V CC al activar el sintonizador o las funciones ATA (Activación automática del sintonizador), AF (Frecuencias alternativas) o TA (Anuncios de tráfica).

Conexión para protección de la memoria

Si se conecta el terminal 4 o 7 del conector de alimentación de la unidad, el circuito de memoria siempre recibirá alimentación aunque desactive la llave de encendido.

Notas sobre la conexión de los altavoces

- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 ohmios, y con la potencia máxima admisible adecuada, ya que de lo contrario podría dañarlos.*
- *No conecte los terminales del sistema de altavoces al chasis del automóvil, ni los del altavoz izquierdo a los del derecho.*
- *No intente conectar los altavoces en paralelo.*
- *No conecte altavoces activos (con amplificadores incorporados) a los terminales de altavoces de la unidad. Si lo hiciese, podría dañar tales altavoces. Por lo tanto, cerciórese de conectar altavoces pasivos a estos terminales.*

Anslutning

Sökerhetsföreskrifter

- Denna bilstereo är endast avsedd för anslutning till ett negativt jordat, 12 V bilbatteri.
- Anslut enheten till strömförsörjningen sedan alla andra anslutningar gjorts.
- **Dra samtliga jordledningar till en och samma jordningspunkt.**
- Anslut pol 4 eller pol 7 i enhetens strömanslutning till en fri krets med högre märkdata än enheten. Om du ansluter denna enhet i kombination med andra stereokomponenter måste den strömkrets de är anslutna till ha högre märkdata än summan av de enskilda komponenternas märkdata. Om det inte finns någon strömkrets med lika höga märkdata som enhetens ansluter du enheten direkt till bilbatteriet. Om det inte finns några bilkretsar tillgängliga för en ljudenhet ansluter du den till en bilkrets med högre märkdata än enheten så att inga andra kretsar bryts om enhetens säkring skulle gå.

Montera bilstereon i en bil vars tändlås inte har något strömläge

— Omkopplaren POWER SELECT

Innan bilstereon levererades från fabriken ställdes belysningen i teckenfönstret in så att den lyser också när bilstereon inte används. Detta kan emellertid orsaka urladdning av batteriet när du använder bilstereon i **en bil, vars tändlås saknar läget ACC (strömläge). Skjut omkopplaren POWER SELECT på bilstereons översidan till läge ⓫, och tryck sedan på återställningsknappen** för att undvika att bilbatteriet laddas ur. Nu lyser inte längre belysningen i teckenfönstret när bilstereon inte används.

Obsevera

Varningssignalen, som varnar om du inte har tagit loss frontpanelen, ljuder inte när omkopplaren POWER SELECT står i läge ⓫.

Nollställningsknappen

Kom ihåg att använda en penna eller något annat spetsigt föremål för att trycka på nollställningsknappen när anslutningen och monteringen är klar.

Att observera angående kontrollfunktionen

Pol 5 i enhetens strömanslutning ger + 12 V likström när du slår på radion eller aktiverar någon av funktionerna ATA (Automatic Tuner Activation), AF (Alternative Frequency) eller TA (Traffic Announcement).

Anslutning för minnesstöd

När pol 4 eller pol 7 i enhetens strömanslutning är ansluten förses minneskretsen alltid med ström, även när tändningen slås av.

Att observera angående högtalarnas anslutning

- *Slå av bilstereon innan du ansluter högtalarna.*
- *Anslut endast högtalare, vars impedans varierar från 4 till 8 ohm och som har tillräcklig effekthanteringskapacitet för att skydda högtalarna mot skador.*
- *Anslut inte något av högtalaruttagen till bilens chassi. Anslut inte heller uttagen på höger högtalare till uttagen på vänster högtalare.*
- *Anslut inte högtalarna parallellt.*
- *Anslut inte aktiva högtalare (med inbyggda slutsteg) till bilstereons högtalaruttag, eftersom de kan skada de aktiva högtalarna. Var noga med att bara ansluta passiva högtalare till dessa uttag.*

Ligações

Advertência

- Este aparelho foi projectado para funcionar somente com corrente contínua de 12 V com massa negativa.
- Ligue o aparelho à fonte de alimentação do automóvel depois de completar todas as outras ligações.
- **Ligue todos os fios de terra num ponto de massa comum.**
- Ligue o pino 4 ou o pino 7 do conector de alimentação do aparelho a um circuito livre do automóvel com uma tensão superior à do fusível do aparelho. Se ligar este aparelho com outros componentes estéreo, o circuito do automóvel a que estiverem ligados deve ter uma tensão superior à da soma dos fusíveis dos componentes individuais. Se nenhum circuito do automóvel tiver uma tensão tão elevada como a do fusível do aparelho, ligue-o directamente à bateria. Se nenhum circuito do automóvel se destinar especificamente à ligação deste aparelho, ligue-o a um circuito do automóvel que tenha uma tensão superior à do fusível do aparelho, de tal modo que, se o fusível rebentar, nenhum outro circuito seja afectado.

Se o seu automóvel não estiver equipado com uma chave de ignição com posição acessórios

— Interruptor POWER SELECT

A ilumitação do painel frontal é regulada na fábrica para se manter acesa, mesmo quando o aparelho não estiver ligado. No entanto, esta regulação pode provocar a descarga da bateria **se o aparelho for utilizado em automóveis sem chave de ignição com posição acessórios.** Para evitar a descarga da bateria, **regule o interruptor POWER SELECT, situado na parte superior do aparelho, para a posição ⓫. Em seguida, carregue no botão de reinicialização.** A iluminação é regulada para ficar apagada enquanto o aparelho estiver desligado.

Nota

O alarme de advertência do painel frontal não é activado quando o interruptor POWER SELECT estiver regulado para a posição ⓫.

Botão de reinicialização

Quando terminar a instalação e as ligações, não se esqueça de carregar no botão de reinicialização com a ponta de uma caneta, etc.

Nota sobre a função do controlo

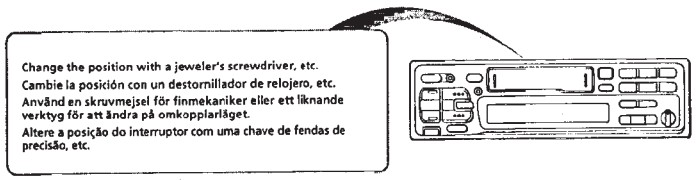
O pino 5 do conector de alimentação do aparelho fornece + 12 V CC quando se liga o sintonizador ou se activam as funções ATA (Activação automática do sintonizador), AF (Frequência alternativa) ou TA (Informações sobre o trânsito).

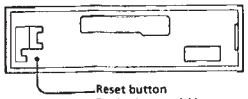
Ligação para alimentação contínua da memória

Quando está ligado o pino 4 ou o pino 7 do conector de alimentação do aparelho, o circuito da memória recebe sempre alimentação, mesmo que não rode a chave da ignição.

Notas sobre a ligação dos altifalantes

- *Antes de ligar os altifalantes, desligue o aparelho.*
- *Utilize altifalantes com impedância de 4 a 8 ohm, e com capacidade admissível de potência adequada. Caso contrário, os altifalantes poderão sofrer avarias.*
- *Não ligue os terminais do sistema de altifalantes ao chassis do automóvel, e não ligue os terminais do altifalante direito aos terminais do altifalante esquerdo.*
- *Não tente ligar os altifalantes em paralelo.*
- *Não ligue nenhum sistema de altifalantes activos (com amplificadores incorporados) aos terminais dos altifalantes do aparelho. Caso o faça, poderá avariar o sistema de altifalantes activos. Portanto, não se esqueça de ligar altifalantes passivos a estes terminais.*


Change the position with a jeweler's screwdriver, etc.
Cambie la posición con un destornillador de relojero, etc.
Använd en skruvmejsel för finmekaniker eller ett liknande verktyg för att ändra på omkopplarläget.
Altere a posição do interruptor com uma chave de fendas de precisão, etc.



Power Connection

Power connectors may vary depending on the car. Check your car's power connector diagram to make sure the connections match correctly. There are two basic types. You may need to switch the positions of the jump connector. Before connecting the unit to the car's power supply, be sure to match the position of the jump connector to the car's pin order. If the power connector of your car does not match the connector on the unit, use the supplied connector ⑦. If you have any questions or problems connecting your unit that are not covered in this manual, please consult the car dealer.

WARNING

Jump connector

Check the pin position of the power connector of the car with the table on the below. If positions 4 and 7 are reversed, remove the jump connector and shift it to the rightmost position as shown in the illustration.

Conexión de alimentación

Los conectores de alimentación pueden variar en función del automóvil. Consulte el diagrama del conector de alimentación del automóvil para comprobar que las conexiones coinciden correctamente. Existen dos tipos básicos. Es posible que sea necesario cambiar las posiciones del conector de empalme. Antes de conectar la unidad al suministro de alimentación del automóvil, asegúrese de que la posición del conector de empalme coincide con el orden de terminales del dicho automóvil. Si el conector de alimentación del automóvil no coincide con el de la unidad, emplee el conector ⑦ suministrado. Si desea realizar alguna consulta o solucionar algún problema referentes a la conexión de la unidad que no aparezcan en este manual, póngase en contacto con el concesionario automovilístico.

ADVERTENCIA

Conector de empalme

Compruebe la posición de terminal del conector de alimentación del automóvil con la tabla que aparece más abajo. Si las posiciones 4 y 7 se invierten, retire el conector de empalme y desplácelo hasta la posición del extremo derecho como se muestra en la ilustración.

Strömanslutningsschema

Strömanslutningarna kan variera beroende på vilken bil du har. Kontrollera bilens diagram över strömanslutningar för att kontrollera att anslutningarna passar ihop. Det finns två huvudtyper. Du kan behöva ändra positionerna på överkopplingen. Innan du ansluter enheten till bilens strömförsörjning bör du kontrollera att överkopplingens placering överensstämmer med bilens polordning. Om din bils strömanslutningar inte överenstämmer med anslutningen på enheten använder du det medföljande kontaktdone ⑦. Om du har några frågor eller problem när det gäller anslutningen av enheten som inte tas upp i denna bruksanvisning kan du kontakta bilåterförsäljaren.

VARNING

Överkoppling

Jämför bilens strömanslutning med tabellen till nedan. Om positionerna 4 och 7 är omkastade tar du bort överkopplingen och flyttar den till positionen längst till höger.

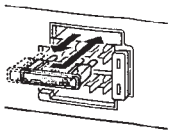
Diagrama de ligação de corrente

Os conectores de alimentação podem variar de automóvel para automóvel. Verifique o diagrama do conector de alimentação do seu automóvel, para ter a certeza de que a correspondência das ligações está correcta. Há dois tipos básicos. Pode ter que trocar as posições do conector jump. Antes de ligar o aparelho à fonte de alimentação do automóvel, não se esqueça de fazer a correspondência entre a posição do conector jump e a ordem dos pinos do automóvel. Se o conector de alimentação do seu automóvel não corresponder ao conector do aparelho, utilize os conector ⑦ fornecido. Se tiver dúvidas o problemas ao ligar o aparelho que não estejam referidos neste manual, consulte o vendedor do automóvel.

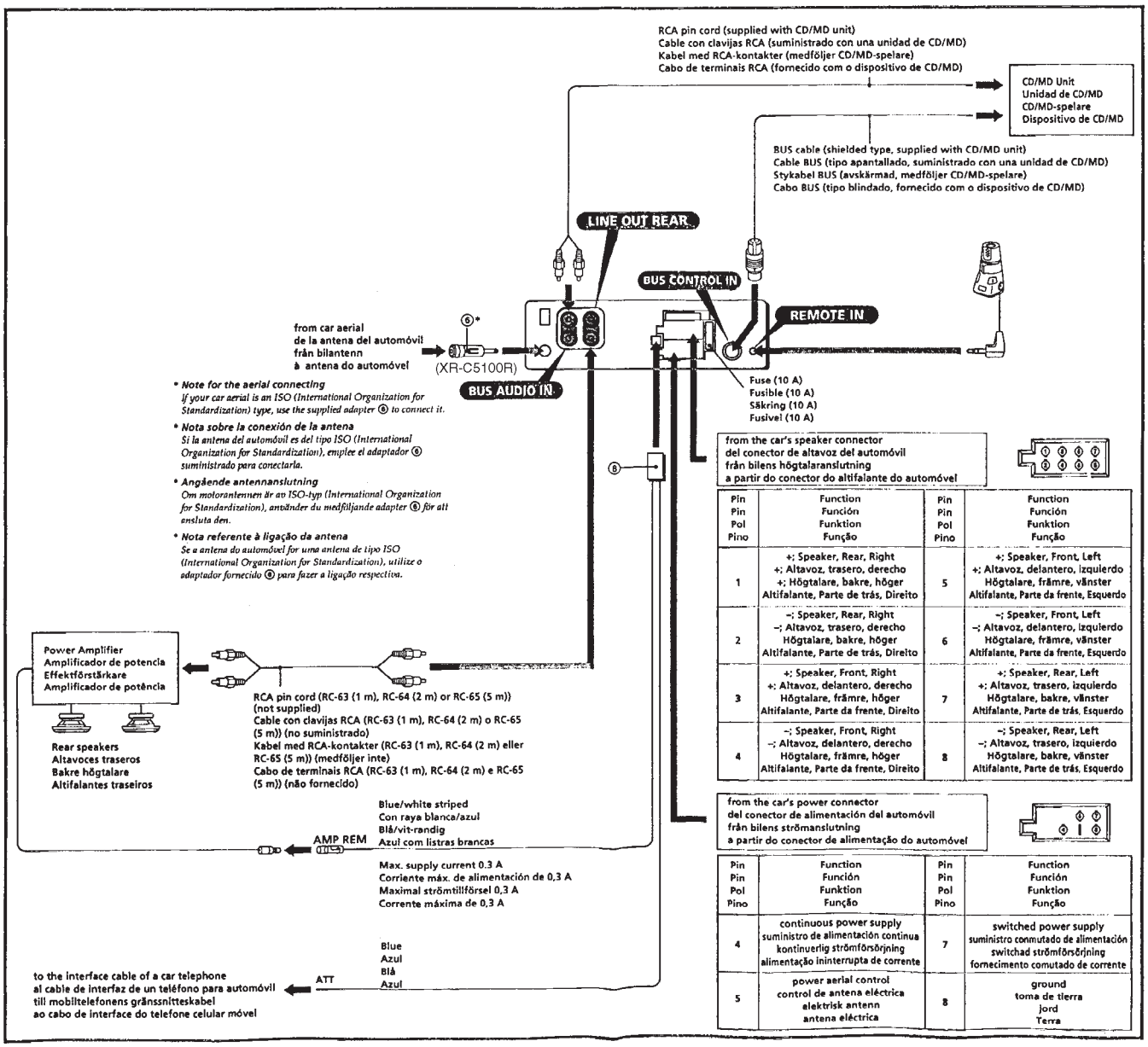
AVISO

Conector jump

Verifique a posição dos pinos do conector de alimentação do automóvel na tabela abaixo. Se as posições 4 e 7 estiverem invertidas, remova o conector jump e mude-o para a posição mais à direita, tal como se mostra na ilustração.



Connection example / Ejemplo de conexiones / Anslutningarna enligt exemplet / Exemplo de ligações

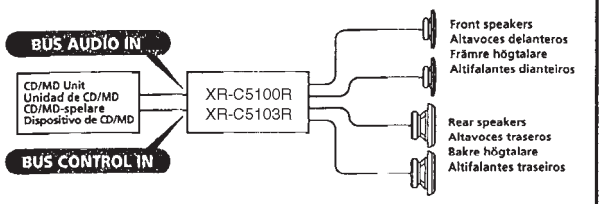

RCA pin cord (supplied with CD/MD unit)
Cable con clavijas RCA (suministrado con una unidad de CD/MD)
Kabel med RCA-kontakter (medföljer CD/MD-spelare)
Cabo de terminais RCA (fornecido com o dispositivo de CD/MD)
CD/MD Unit
Unidad de CD/MD
CD/MD-spelare
Dispositivo de CD/MD
BUS cable (shielded type, supplied with CD/MD unit)
Cable BUS (tipo apantallado, suministrado con una unidad de CD/MD)
Stykabel BUS (avskärmad, medföljer CD/MD-spelare)
Cabo BUS (tipo blindado, fornecido com o dispositivo de CD/MD)
LINE OUT REAR
BUS CONTROL IN
REMOTE IN
BUS AUDIO IN
(XR-C5100R)
from car aerial
de la antena del automóvil
från bilantenn
à antena do automóvel
⑥*
Fuse (10 A)
Fusible (10 A)
Säkring (10 A)
Fusível (10 A)
* Note for the aerial connecting
If your car aerial is an ISO (International Organization for Standardization) type, use the supplied adapter ⑥ to connect it.
* Nota sobre la conexión de la antena
Si la antena del automóvil es del tipo ISO (International Organization for Standardization), emplee el adaptador ⑥ suministrado para conectarla.
* Angående antennanslutning
Om motorantennen är av ISO-typ (International Organization for Standardization), använder du medföljande adapter ⑥ för att ansluta den.
* Nota referente à ligação da antena
Se a antena do automóvel for uma antena de tipo ISO (International Organization for Standardization), utilize o adaptador fornecido ⑥ para fazer a ligação respectiva.
from the car's speaker connector
del conector de altavoz del automóvil
från bilens högtalaranslutning
a partir do conector do altifalante do automóvel
Power Amplifier
Amplificador de potencia
Effektförstärkare
Amplificador de potência
Rear speakers
Altavoces traseros
Bakre högtalare
Altifalantes traseiros
RCA pin cord (RC-63 (1 m), RC-64 (2 m) or RC-65 (5 m)) (not supplied)
Cable con clavijas RCA (RC-63 (1 m), RC-64 (2 m) o RC-65 (5 m)) (no suministrado)
Kabel med RCA-kontakter (RC-63 (1 m), RC-64 (2 m) eller RC-65 (5 m)) (medföljer inte)
Cabo de terminais RCA (RC-63 (1 m), RC-64 (2 m) e RC-65 (5 m)) (não fornecido)
AMP REM
Blue/white striped
Con raya blanca/azul
Blå/vit-randig
Azul com listras brancas
Max. supply current 0.3 A
Corriente máx. de alimentación de 0,3 A
Maximal strömtillförsel 0,3 A
Corrente máxima de 0,3 A
to the interface cable of a car telephone
al cable de interfaz de un teléfono para automóvil
till mobiltelefonens gränssnittskabel
ao cabo de interface do telefone celular móvel
ATT
Blue
Azul
Blå
Azul
from the car's power connector
del conector de alimentación del automóvil
från bilens strömanslutning
a partir do conector de alimentação do automóvel

Pin Pin Pol Pino	Function Función Funktion Função	Pin Pin Pol Pino	Function Función Funktion Função
1	+; Speaker, Rear, Right +; Altavoz, trasero, derecho +; Högtalare, bakre, höger Altifalante, Parte de trás, Direito	5	+; Speaker, Front, Left +; Altavoz, delantero, izquierdo Högtalare, främre, vänster Altifalante, Parte da frente, Esquerdo
2	–; Speaker, Rear, Right –; Altavoz, trasero, derecho Högtalare, bakre, höger Altifalante, Parte de trás, Direito	6	–; Speaker, Front, Left –; Altavoz, delantero, izquierdo Högtalare, främre, vänster Altifalante, Parte da frente, Esquerdo
3	+; Speaker, Front, Right +; Altavoz, delantero, derecho Högtalare, främre, höger Altifalante, Parte da frente, Direito	7	+; Speaker, Rear, Left +; Altavoz, trasero, izquierdo Högtalare, bakre, vänster Altifalante, Parte de trás, Esquerdo
4	–; Speaker, Front, Right –; Altavoz, delantero, derecho Högtalare, främre, höger Altifalante, Parte da frente, Direito	8	–; Speaker, Rear, Left –; Altavoz, trasero, izquierdo Högtalare, bakre, vänster Altifalante, Parte de trás, Esquerdo

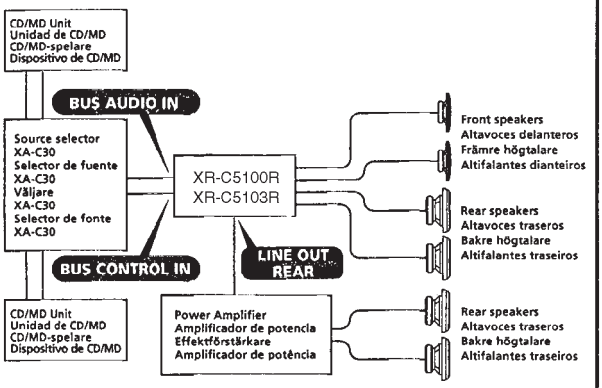
Pin Pin Pol Pino	Function Función Funktion Função	Pin Pin Pol Pino	Function Función Funktion Função
4	continuous power supply suministro de alimentación continua kontinuerlig strömförsörjning alimentação ininterrupta de corrente	7	switched power supply suministro conmutado de alimentación switchad strömförsörjning fornecimento comutado de corrente
5	power aerial control control de antena eléctrica elektrisk antenn antena eléctrica	8	ground toma de tierra jord Terra

Connection Diagram
Diagrama de conexiones
Kopplingsschema
Diagrama de ligações

Example 1/Ejemplo 1/Exempel 1/Exemplo 1



Example 2/Ejemplo 2/Exempel 2/Exemplo 2



Notes
- *If you connect an optional power amplifier and do not use the built-in amplifier, the beep-tone will be disabled.*
- *Be sure to connect the ground cord first, before connecting to the amplifier.*

Notas
- *Si conecta un amplificador opcional de potencia y no utiliza el incorporado, los pitidos se desactivarán.*
- *Asegúrese de conectar primero el cable de puesta a tierra antes de realizar la conexión al amplificador.*

Observera
- *Om du ansluter en effektförstärkare (tillval) och inte använder den inbyggda förstärkaren deaktiveras ljudsignalen.*
- *Se till att ansluta den jordade kabeln först innan du ansluter till förstärkaren.*

Notas
- *Se ligar um amplificador de potência opcional e não utilizar o amplificador incorporado, desactiva o sinal sonoro.*
- *Ligue o cabo de massa antes de fazer a ligação ao amplificador.*

Caution

Cautionary notice for handling the bracket ①.
Handle the bracket carefully to avoid injuring your fingers.

Precaución

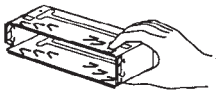
Advertencia sobre la manipulación del soporte ①.
Tenga mucho cuidado al manipular el soporte para evitar posibles lesiones en los dedos.

Varning

Att observera angående konsolen ①.
Hantera konsolen med största aktsamhet så att du inte skadar fingrarna.

Cuidado

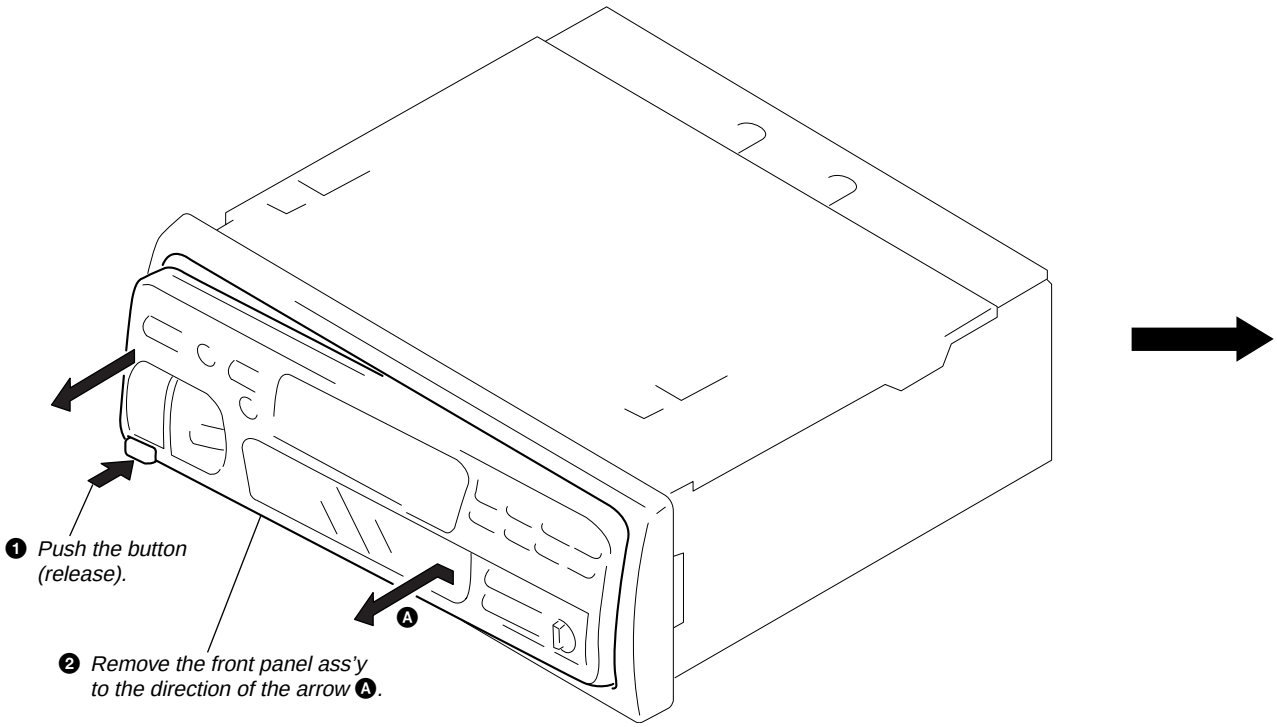
Aviso sobre as precauções a tomar no manuseamento do suporte ①.
Pegue no suporte com cuidado para não magoar os dedos.



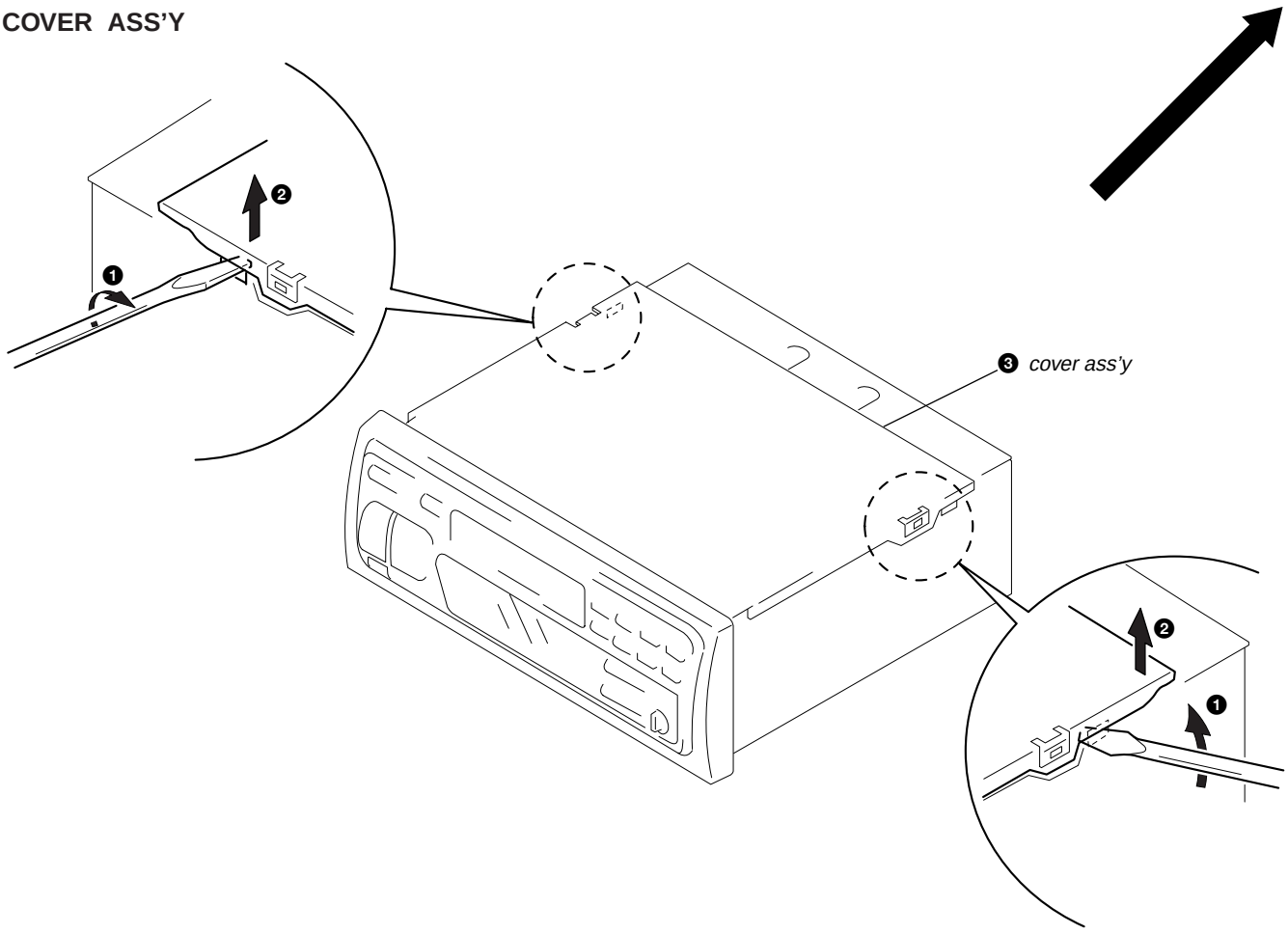
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

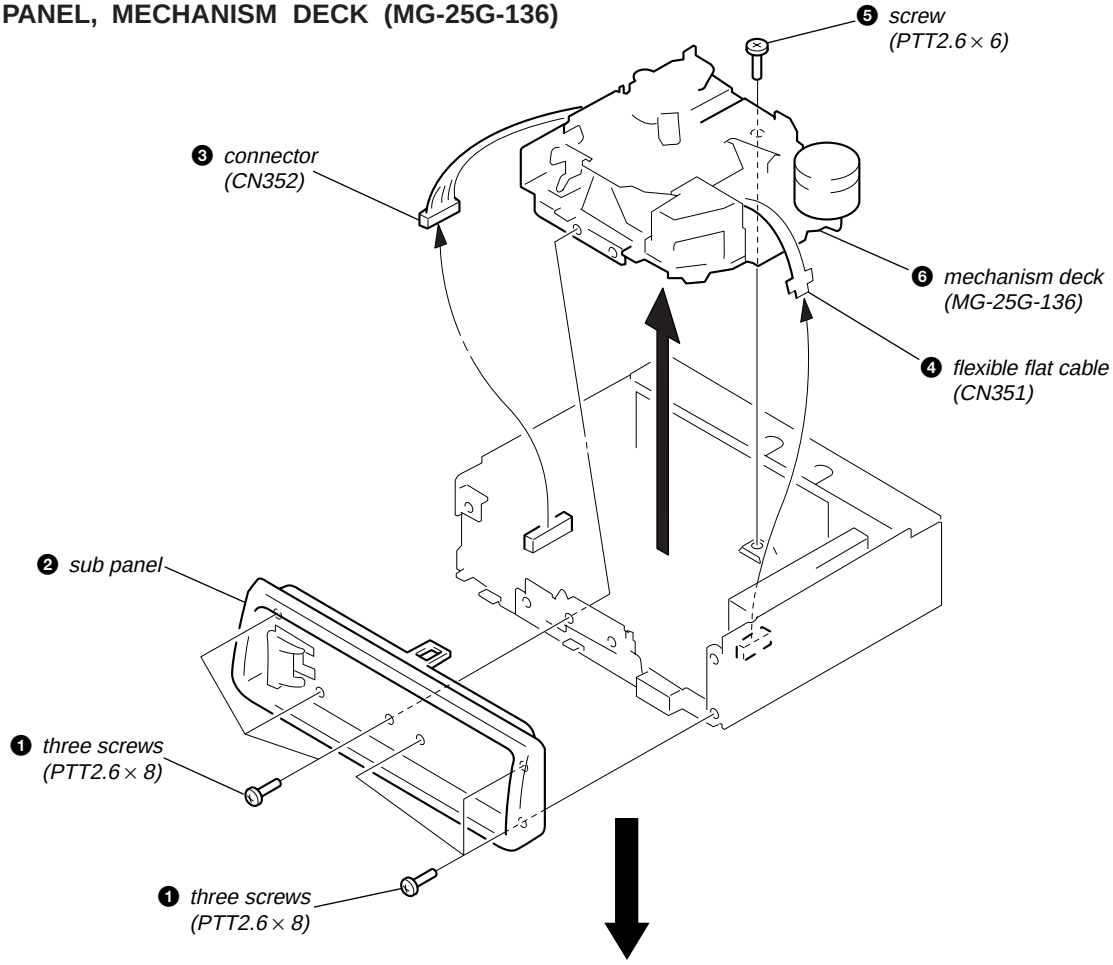
FRONT PANEL ASS'Y



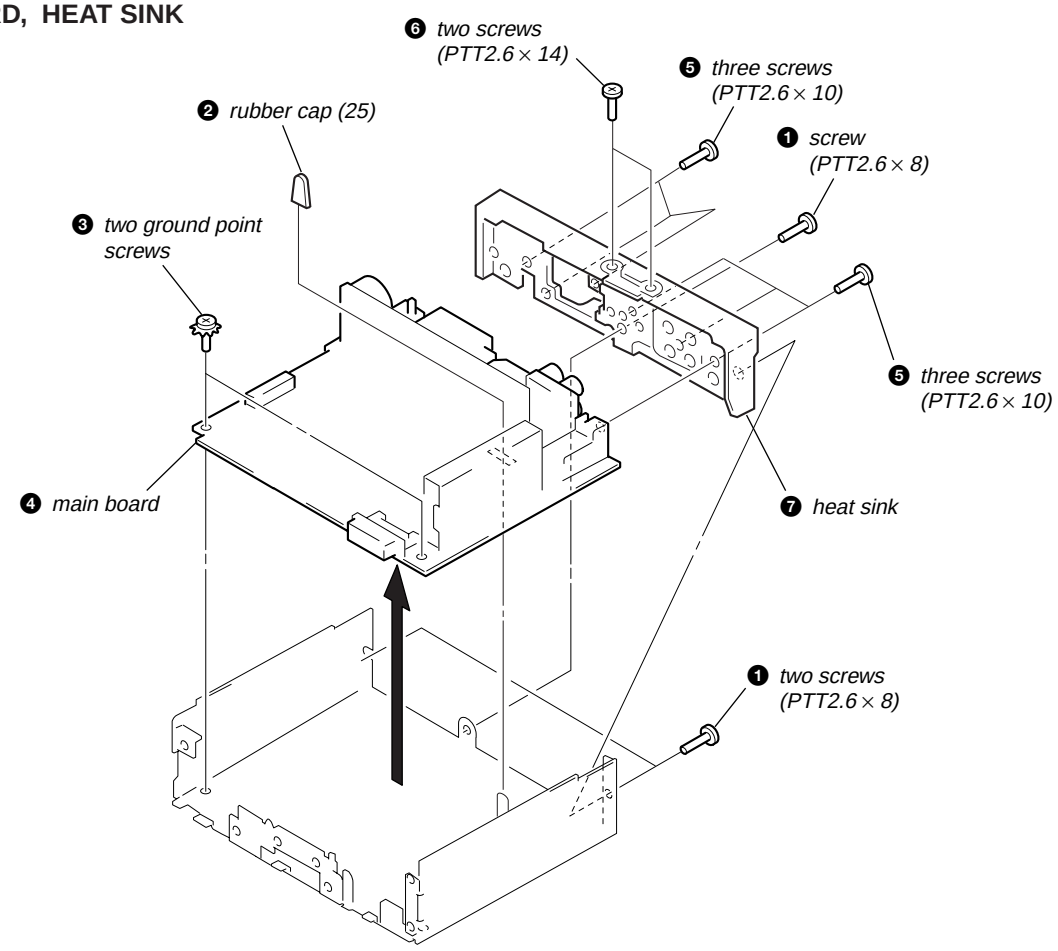
COVER ASS'Y



SUB PANEL, MECHANISM DECK (MG-25G-136)



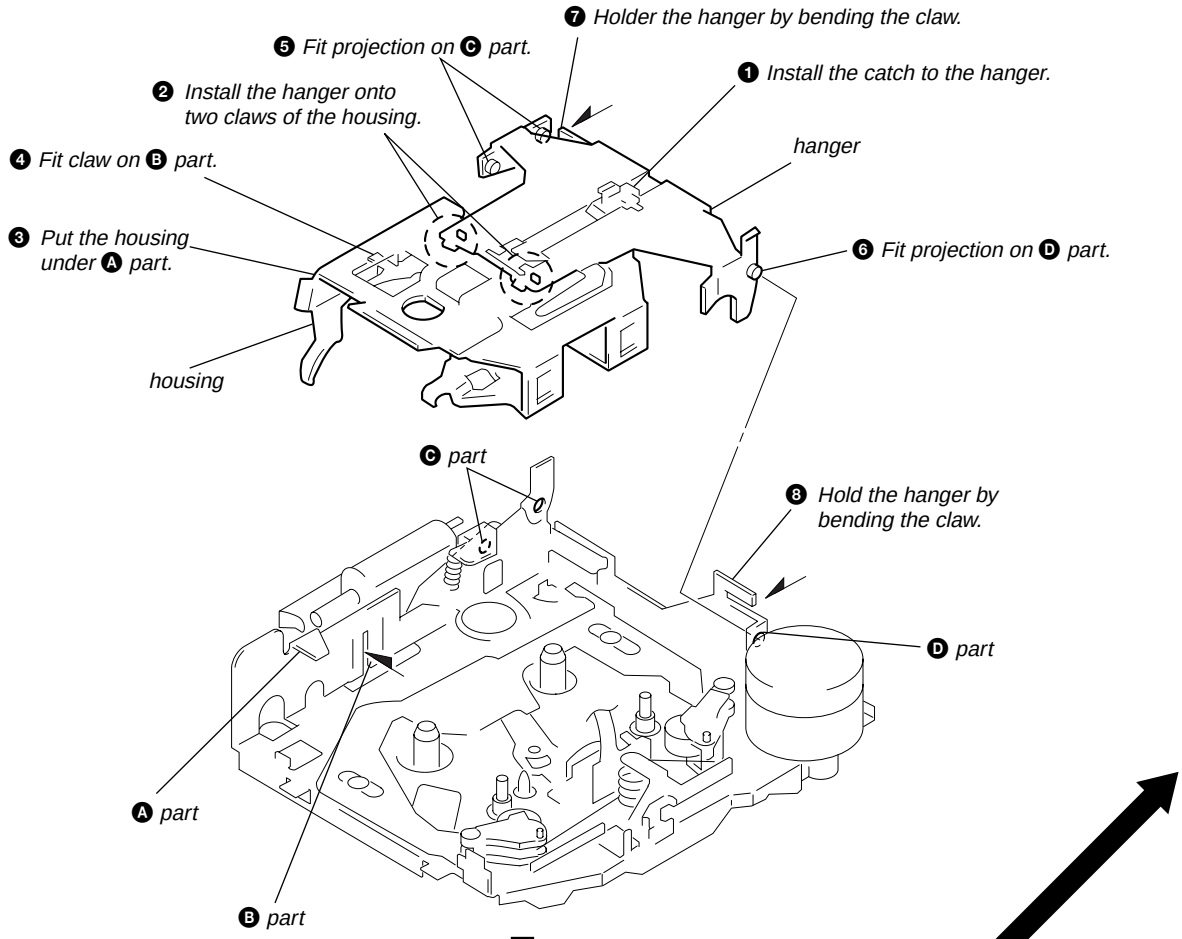
MAIN BOARD, HEAT SINK



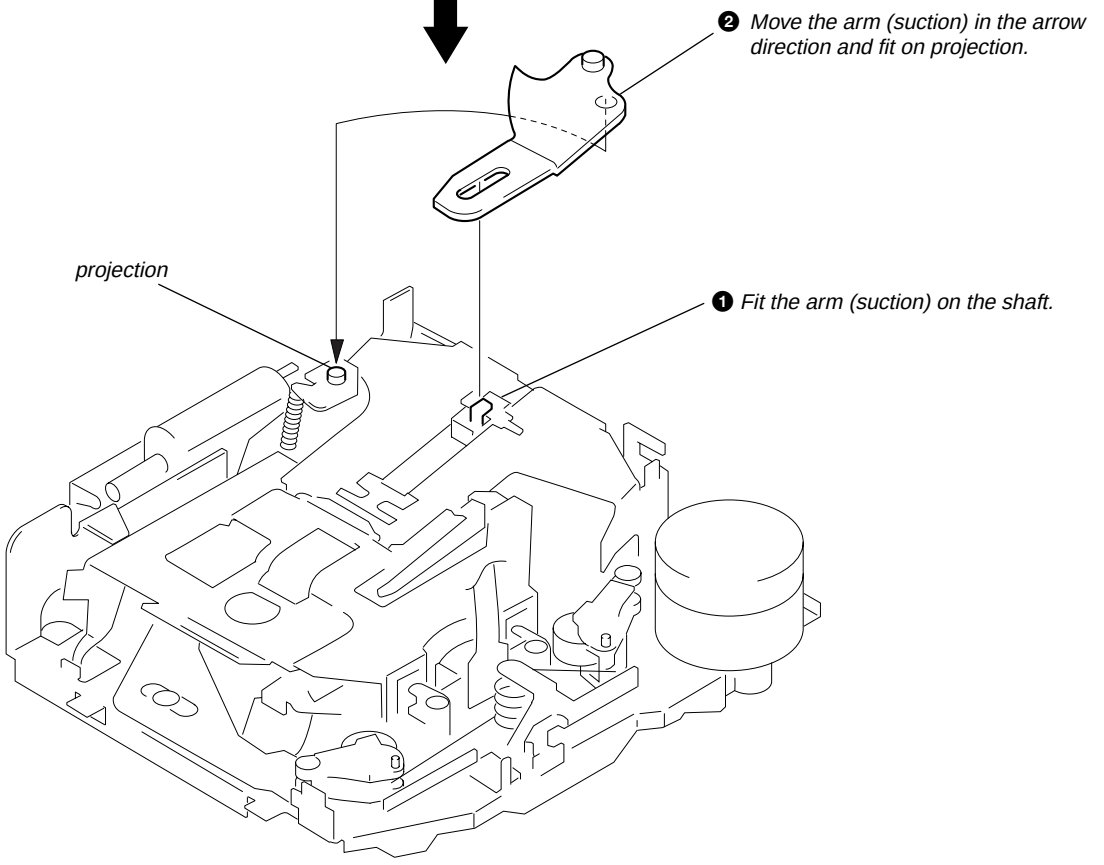
SECTION 3
ASSEMBLY OF MECHANISM DECK

Note: Follow the assembly procedure in the numerical order given.

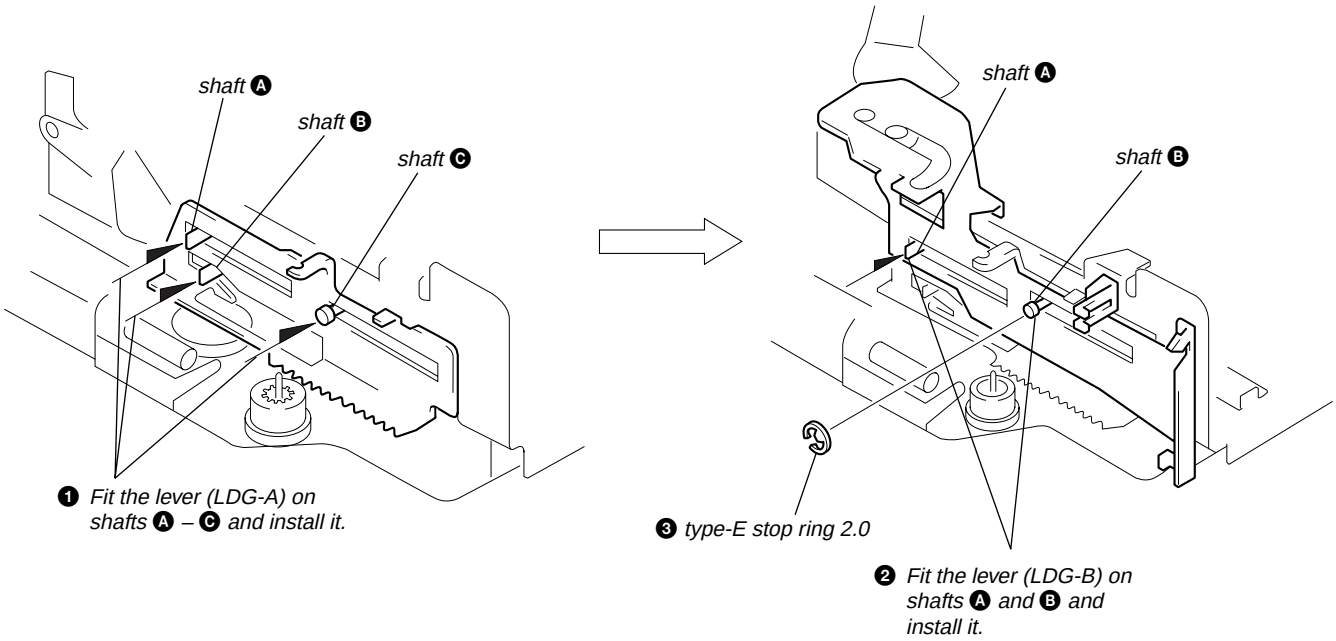
HOUSING


❼ Holder the hanger by bending the claw.
❺ Fit projection on Ⓒ part.
❶ Install the catch to the hanger.
❷ Install the hanger onto two claws of the housing.
hanger
❹ Fit claw on Ⓑ part.
❸ Put the housing under Ⓐ part.
❻ Fit projection on Ⓓ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

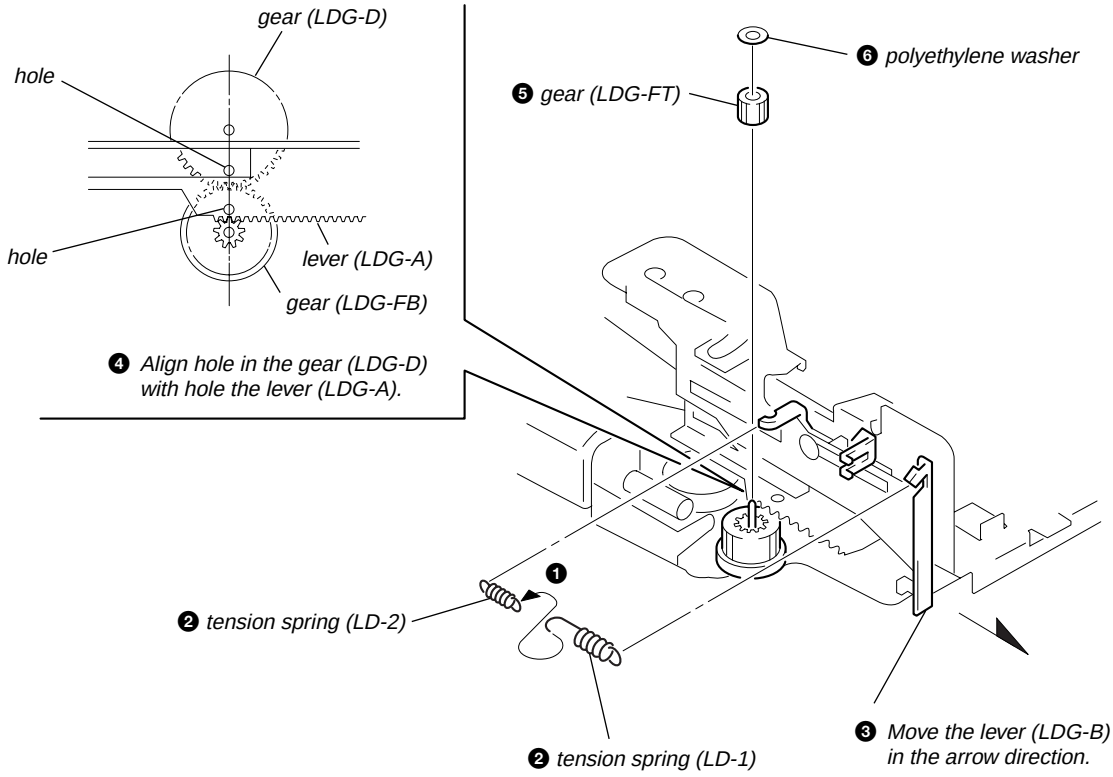
ARM (SUCTION)



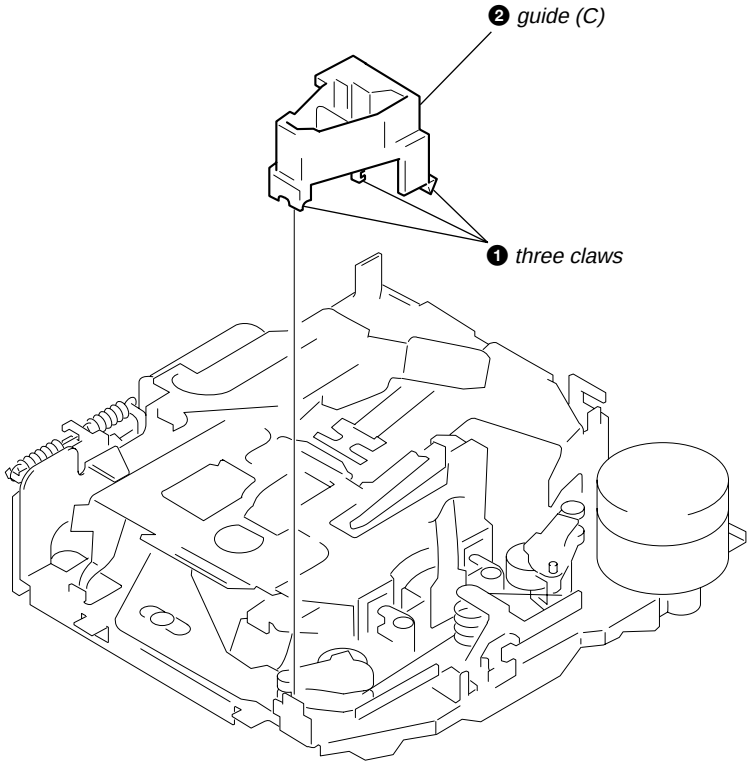
LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
shaft Ⓐ
shaft Ⓑ
❸ type-E stop ring 2.0
❷ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

GEAR (LDG-FT)



GUIDE (C)



SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head, pinch roller, rubber belt, capstan, idlers
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the power supply voltage unless otherwise noted.

• Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	30 - 65 g•cm (0.42 - 0.90 oz•inch)
Forward Back Tension	CQ-102C	0.5 - 4.5g•cm (0.01 - 0.06 oz•inch)
Reverse	CQ-102RC	30 - 65 g•cm (0.42 - 0.90 oz•inch)
Reverse Back Tension	CQ-102RC	0.5 - 4.5g•cm (0.01 - 0.06 oz•inch)
FF, REW	CQ-201B	60 - 200 g•cm (0.83 - 2.78 oz•inch)

• Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 90 g (more than 3.18 oz)
Reverse	CQ-403R	more than 90 g (more than 3.18 oz)

SECTION 5
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM (MW) Auto Scan/Stop Level adjustments can be performed easier than it in ordinary procedure.

<Set the Test Mode>
1. Set the "power select" switch (S801) is "A" position.
2. Turn ON the regulated power supply. (All LEDs on the set lights up, and the clock is displayed.)
   Note: Press the [OFF] button, if the clock is not displayed.
3. Push the preset [4] button.
4. Push the preset [5] button.
5. Press the preset [1] button for more than two seconds.
6. Then the display indicates all lights, the test mode is set.

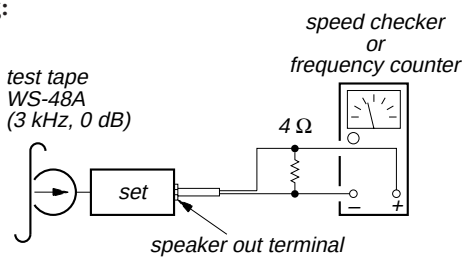
<Release the Test mode>
1. Push the [OFF] button.
2. Return the "power select" switch (S801) to initially set position.

See the adjustment location from on page 17 for the adjustment.

TAPE DECK SECTION | **0 dB=0.775 V**

Tape Speed Adjustment

Setting:



Procedure:
1. Put the set into the FWD PB mode.
2. Adjust adjustment resistor for inside capstan motor so that the reading on the speed checker or frequency counter becomes in specification.

Specification: Constant speed

Speed checker	Frequency counter
–1.5 to +2.5%	2,955 to 3,075 Hz

Adjustment Location: See page 17.

TUNER SECTION

0 dB=1μV

Cautions during repair
When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

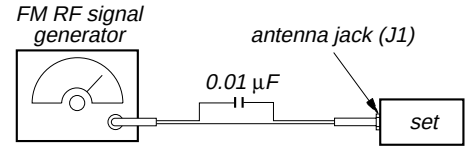
Note:
Adjust the tuner section in the sequence shown below.

1. FM Auto Scan/Stop Level Adjustment.
2. FM Noise Focus Adjustment. (XR-C5100R only)
3. FM Stereo Separation Adjustment.
4. FM Signal Meter Adjustment.
5. AM (MW) Auto Scan/Stop Level Adjustment.

FM Auto Scan/Stop Level Adjustment

Setting:

SOURCE button: FM

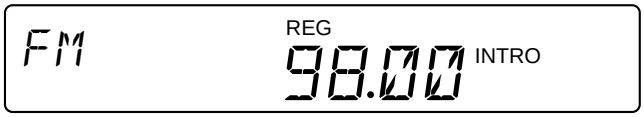


Carrier frequency : 98.0 MHz
Output level : 22 dB (12.6 μV)
Mode : mono
Modulation : 1 kHz, 22.5 kHz deviation (30%)

Procedure:

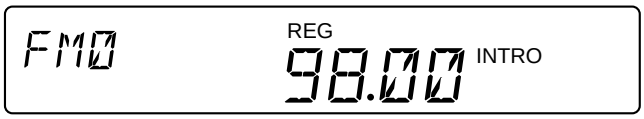
1. Set to the test mode. (See page 14.)
2. Push the SOURCE button and set to FM.

Display



3. Adjust with the volume RV2 on TU1 so that the "FM" indication turns to "FM0" indication on the display window.
   But, in case of already indicated "FM0", turn the RV2 so that put out light "0" indication and adjustment.

Display

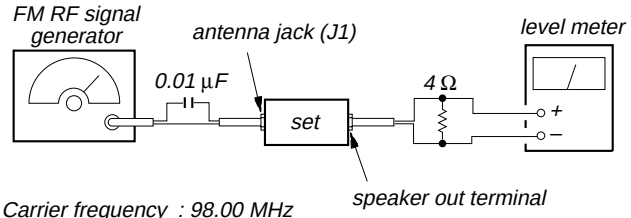


Adjustment Location: See page 17.

FM Noise Focus Adjustment (XR-C5100R only)

Setting:

SOURCE button: FM



Carrier frequency : 98.00 MHz
Output level : 60 dB (1 mV)
Mode : stereo
Modulation : 1 kHz, 75 kHz deviation (100%)

Procedure:

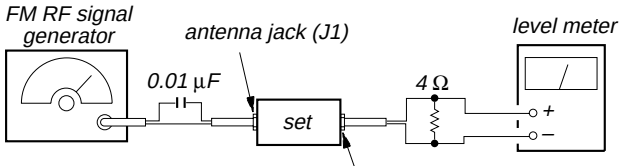
1. Tuner the 98.00 MHz.
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV3 on TU1 so that the output level is (A) –32 ± 2 dB then signal generator input set to –20 dB.

Adjustment Location: See page 17.

FM Stereo Separation Adjustment

Setting:

SOURCE button: FM



Carrier frequency : 98.0 MHz
Output level : 70 dB (3.2 mV)
Mode : stereo
Modulation : main: 1 kHz, 20 kHz deviation (26.7%)
sub: 1 kHz, 20 kHz deviation (26.7%)
19 kHz pilot: 7.5 kHz deviation (10%)

Procedure:

FM Stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 on TU1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 on TU1 for minimum reading.

L-CH Stereo separation: Ⓐ-Ⓑ
R-CH Stereo separation: Ⓒ-Ⓓ
The separations of both channels should be equal.

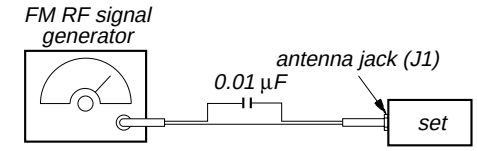
Specification: Separation more than 30 dB

Adjustment Location: See page 17.

FM Signal Meter Adjustment

Setting:

SOURCE button: FM

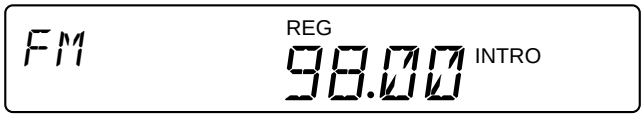


Carrier frequency : 98.00 MHz
Output level : 35 dB (56.2 µV)
Mode : mono
Modulation : no modulation

Procedure:

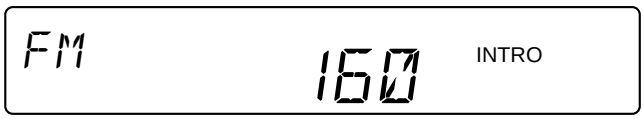
1. Set to the test mode. (See page 14.)
2. Push the SOURCE button and set to FM.

Display



3. Push the 6 button.
4. Adjust RV1 so that the display indication is “160”.

Display



Specification: Display indication: 158 to 162

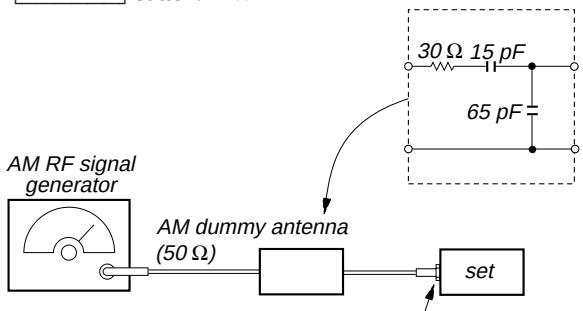
Adjustment Location: See page 17.

AM (MW) Auto Scan/Stop Level Adjustment

Make this adjustment after “FM Auto Scan/Stop Level Adjustment”.

Setting:

SOURCE button: MW



Carrier frequency : 999 kHz
30% amplitude modulation by 1 kHz signal
Output level : 33 dB (44.7 µV)

Procedure:

1. Set to the test mode. (See page 14.)
2. Push the SOURCE button and set to FM.
3. Push the MODE button and set to MW.

Display

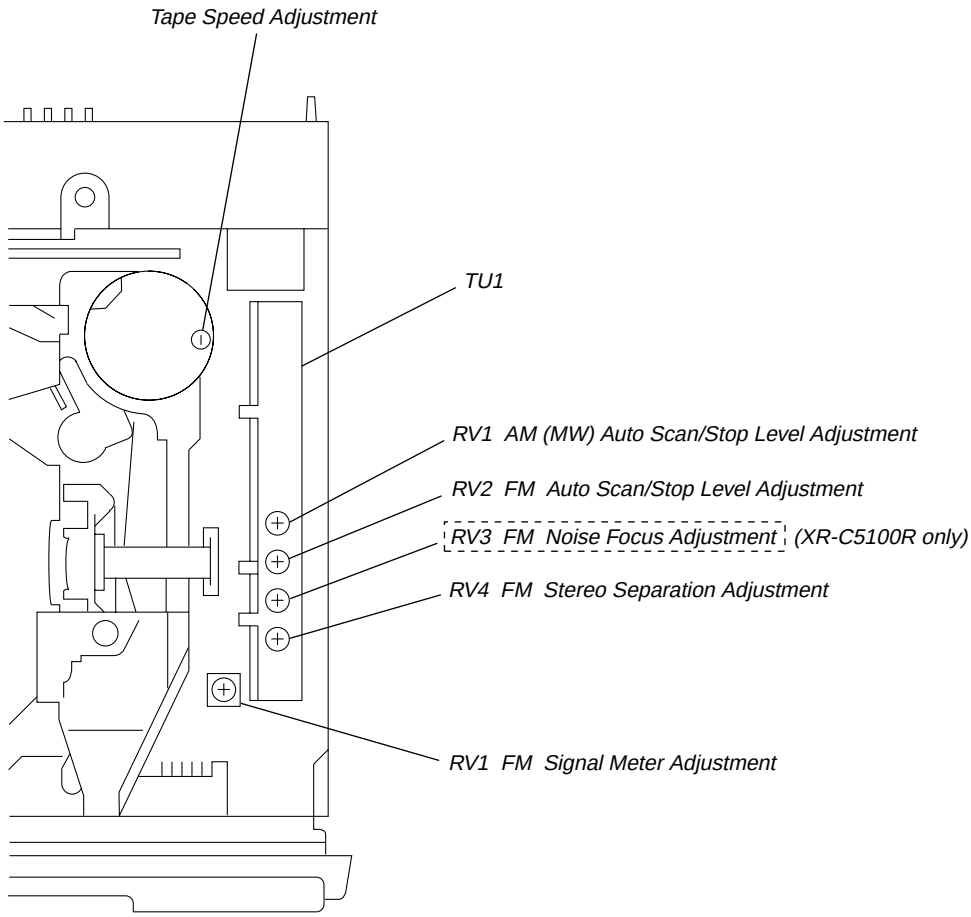
4. Adjust with the volume RV1 on TU1 so that the “MW” indication turns to “MW0” indication on the display window. But, in case of already indicated “MW0”, turn the RV1 so that put out light “0” indication and adjustment.

Display

Adjustment Location: See page 17.

Adjustment Location:

– SET UPPER VIEW –

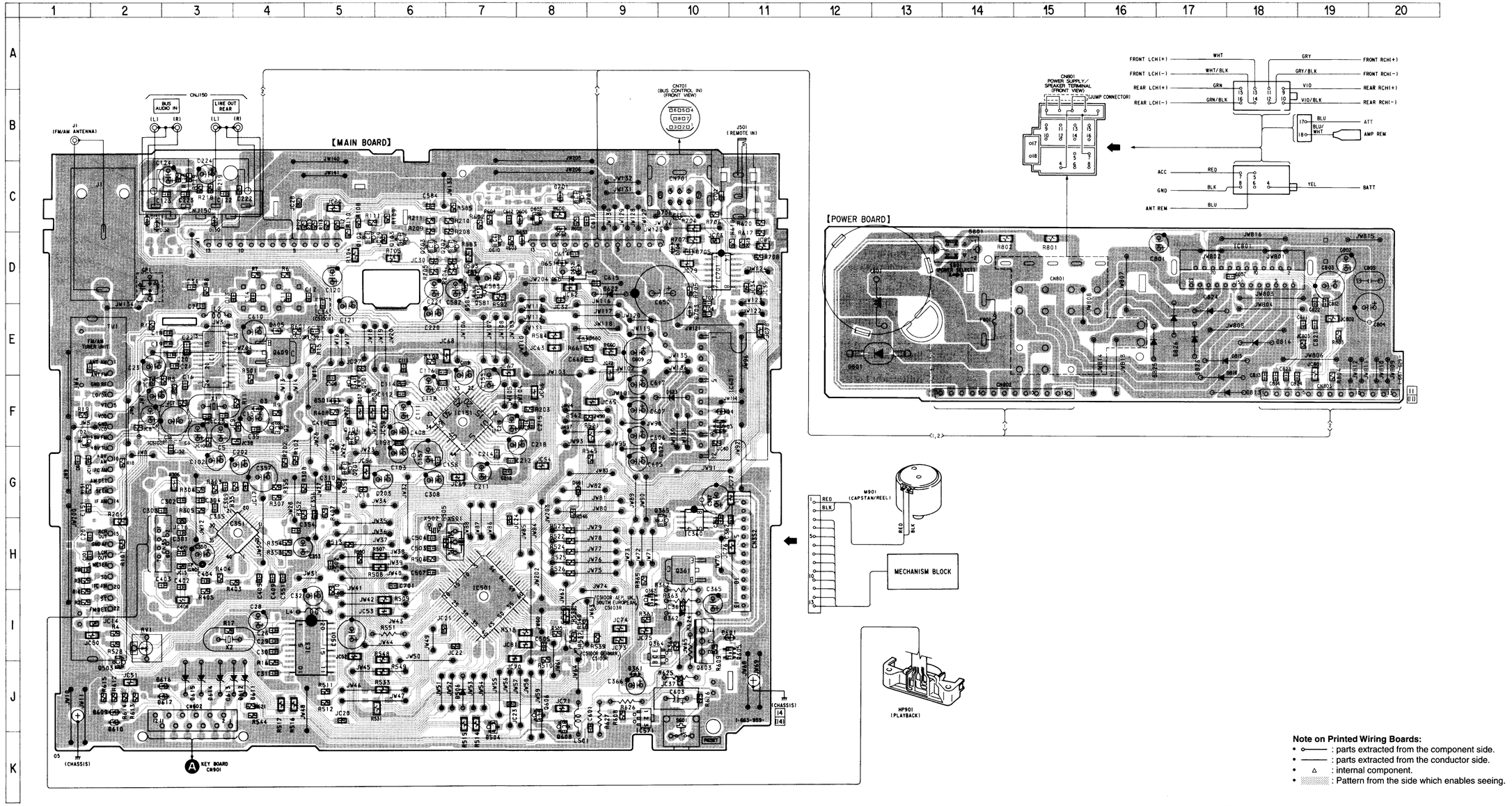

Tape Speed Adjustment
TU1
RV1 AM (MW) Auto Scan/Stop Level Adjustment
RV2 FM Auto Scan/Stop Level Adjustment
RV3 FM Noise Focus Adjustment (XR-C5100R only)
RV4 FM Stereo Separation Adjustment
RV1 FM Signal Meter Adjustment

SECTION 6
DIAGRAMS

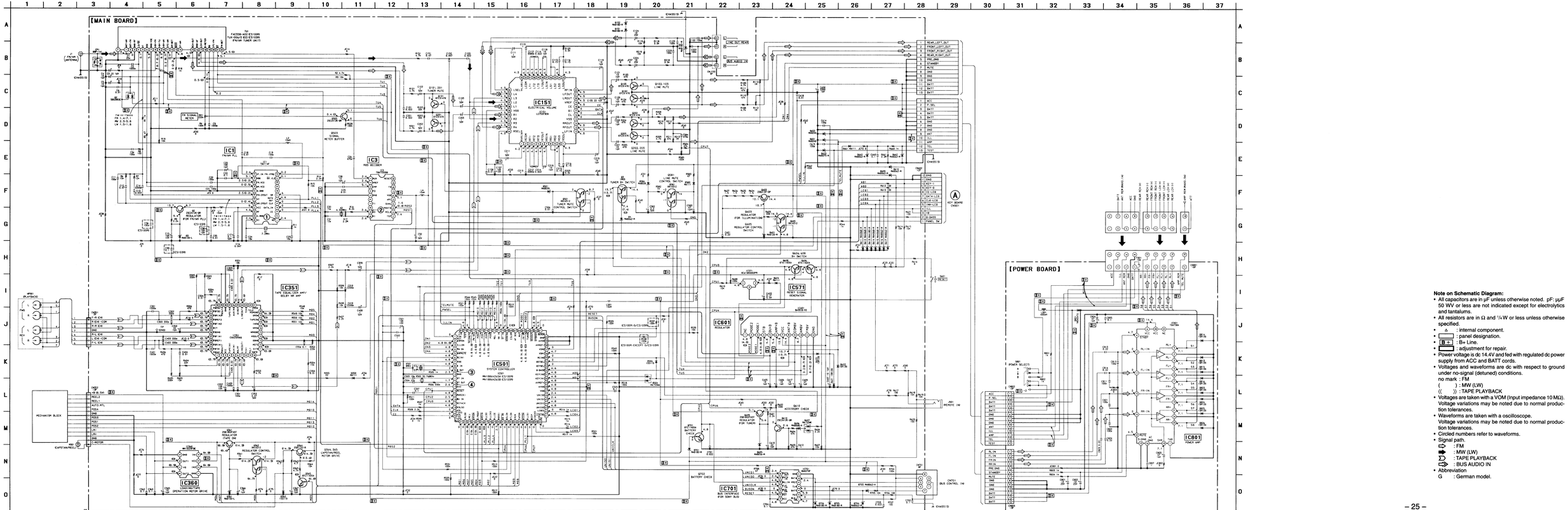
6-1. PRINTED WIRING BOARDS – MAIN Section –

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D2	F-1	D813	E-18
D3	F-4	D814	E-18
D4	F-10	D815	E-17
D150	C-3	D816	F-17
D151	C-2	D823	E-17
D152	C-2	D824	E-17
D350	G-5	D825	E-16
D361	J-9	D826	E-17
D362	I-10		
D501	F-5	IC1	E-3
D504	J-7	IC3	I-5
D506	J-7	IC151	F-7
D583	D-7	IC351	H-4
D584	D-7	IC360	H-10
D601	I-10	IC501	I-7
D605	E-4	IC571	J-9
D606	C-8	IC601	F-11
D607	C-8	IC701	D-10
D609	J-2	IC801	D-18
D610	J-2		
D611	J-4	Q2	F-4
D612	J-4	Q3	F-10
D613	J-3	Q101	F-5
D614	J-3	Q102	D-5
D615	J-3	Q103	D-6
D616	J-3	Q201	G-5
D617	J-3	Q202	D-7
D621	D-8	Q203	D-6
D622	D-9	Q361	H-10
D623	F-10	Q362	I-9
D624	G-9	Q364	I-9
D651	D-8	Q365	H-10
D652	D-8	Q501	F-5
D653	C-8	Q503	J-2
D660	E-8	Q581	D-7
D661	G-8	Q603	I-10
D662	C-8	Q605	I-11
D701	C-8	Q606	J-8
D703	E-10	Q608	J-8
D704	D-10	Q609	E-4
D705	D-10	Q610	D-7
D706	C-10	Q701	C-8
D801	E-13		



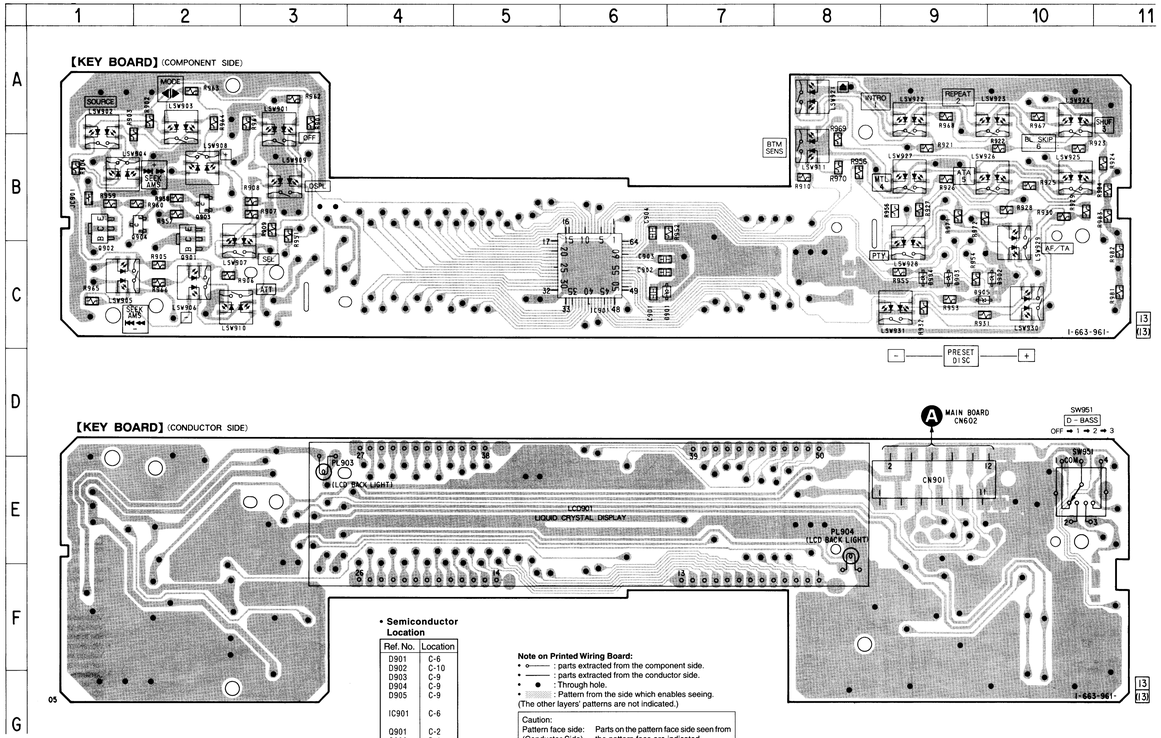
Note on Printed Wiring Boards:
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- △ : internal component.
- ▒▒ : Pattern from the side which enables seeing.



Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF
  50 WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- ▬ : adjustment for repair.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW (LW)
  (( )) : TAPE PLAYBACK
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ➡ : MW (LW)
  Σ : TAPE PLAYBACK
  ⇨ : BUS AUDIO IN
- Abbreviation
  G : German model.

6-3. PRINTED WIRING BOARD – PANEL Section –



• Semiconductor Location

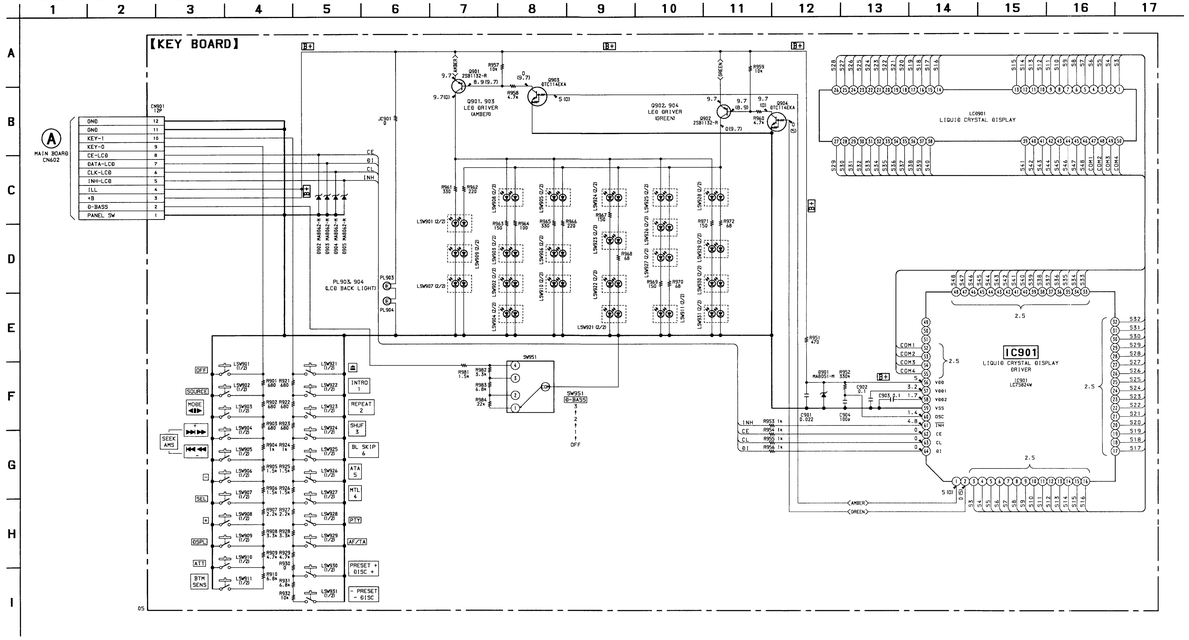
Ref. No.	Location
D901	C-6
D902	C-10
D903	C-9
D904	C-9
D905	C-9
IC901	C-6
Q901	C-2
Q902	B-1
Q903	B-2
Q904	B-2

Note on Printed Wiring Board:
- ○—— : parts extracted from the component side.
- ——● : parts extracted from the conductor side.
- ● : Through hole.
- ▨ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:
Pattern face side: Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.
Parts face side: Parts on the parts face side seen from (Component Side) the parts face are indicated.

6-4. SCHEMATIC DIAGRAM – PANEL Section –



Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : AMBER ILLUMINATION
  ( ) : GREEN ILLUMINATION
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

6-5. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC501 MN1886426SA (XR-C5100R) (SYSTEM CONTROLLER)
IC501 MN1886426SB (XR-C5103R) (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Function
1	TUNMUT	O	FM audio signal muting control output terminal "H": muting on
2	AMPON	O	Standby control signal output to the power amplifier (IC801) "L": standby
3	ILLON	O	Power supply on/off control signal output terminal at the illumination and liquid crystal display driver (IC901) "H": power on At power select switch (S801) on mode: "H" output at the accessory on At power select switch (S801) off mode: "H" output at the power on
4	PW ON	O	Main system power supply on/off control signal output to the BA3918 (IC601) "H": power on
5	$\overline{\text{AMPMUTE}}$	O	Muting control signal output to the power amplifier (IC801) "L": muting on
6	RCIN1	I	Rotary remote commander shift key A/D input terminal
7	VDD	—	Power supply terminal (+5V)
8	X IN	I	Main system clock input terminal (8 MHz)
9	X OUT	O	Main system clock output terminal (8 MHz)
10	GND	—	Ground terminal
11	XT IN	I	Sub system clock input terminal (32.768 kHz)
12	XT OUT	O	Sub system clock output terminal (32.768 kHz)
13	EX2	I	Connected to ground
14	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator (IC571) and reset switch (S601) "L" is input for several 100 msec after power on, then it changes to "H"
15	RDSCKI	I	Serial data transfer clock signal input from the RDS decoder (IC3)
16	BU IN	I	Battery detect signal input terminal "H": battery on
17	KEYACK	I	Input of acknowledge signal for the key entry Acknowledge signal is input to accept function and eject keys in the power off status On at input of "L"
18	VOLSO	O	Serial data output to the electrical volume (IC151)
19	VOLCKO	O	Serial data transfer clock signal output to the electrical volume (IC151)
20	VOLCE	O	Chip enable signal output to the electrical volume (IC151)
21	TAPEMUT	O	Tape muting on/off control signal output to the CXA2509AQ (IC351) "H": tape muting on
22	LMLOD	O	Loading/tape operation motor control signal output to the MM1322XFBE (IC360) (For the loading direction and forward side operation) *1
23	LMEJ	O	Loading/tape operation motor control signal output to the MM1322XFBE (IC360) (For the eject direction and reverse side operation) *1
24	$\overline{\text{AMSON}}$	O	Tape auto music sensor control signal output to the CXA2509AQ (IC351) "L" is output to lower the gain for audio level at FF/REW
25	$\overline{\text{N}}$/R OUT	O	Forward/reverse direction control signal output to the CXA2509AQ (IC351) "L: forward direction, "H": reverse direction
26	$\overline{\text{AMSIN}}$	I	Whether a music is present or not from CXA2509AQ (IC351) is detected at auto music sensor "L": music is present, "H": music is not present
27	PLLSO	O	PLL serial data output to the FM/AM PLL (IC1)
28	PLLCKO	O	PLL serial data transfer clock signal output to the FM/AM PLL (IC1)
29	PLLCE	O	PLL serial chip enable output to the FM/AM PLL (IC1)
30	RDSSI	I	Serial data input from the RDS decoder (IC3)
31	$\overline{\text{AD ON}}$	O	Power supply on/off control signal output for the A/D converter "L": power on
32	DOLON	I/O	Dolby control in/out terminal At initial mode: valid/invalid selection input of dolby function ("L" input: valid) At normal mode: dolby on/off control signal output ("H" output: dolby on) Not used this function (fixed at "H")

Pin No.	Pin Name	I/O	Function
33	MTLON	I/O	METAL control in/out terminal At initial mode: valid/invalid selection input of METAL function (“L” input: valid) At normal mode: METAL on/off control signal output to the CXA2509AQ (IC351) “H”: METAL on
34	CMON	O	Capstan/reel motor (M901) drive signal output terminal “H”: motor on
35	TAPEON	O	Tape system power supply on/off control signal output terminal “H”: tape on
36	$\overline{\text{ACCON}}$	I	Accessory detect signal input terminal “L”: accessory on
37	PLLSI	I	PLL serial data input from the FM/AM PLL (IC1)
38	BEEP	O	Beep sound output terminal
39	LCDCKO	O	Serial data transfer clock signal output to the liquid crystal display driver (IC901)
40	LCDSO	O	Serial data output to the liquid crystal display driver (IC901)
41	$\overline{\text{LCDINH}}$	O	Blank indicate control signal output to the liquid crystal display driver (IC901) “L”: no display
42	LCDCE	O	Chip enable output to the liquid crystal display driver (IC901)
43	UNICKO	O	Serial data transfer clock signal output to the bus interface (IC701) (for SONY bus)
44	UNICKI	I	Serial data reading clock signal input terminal (for SONY bus)
45	UNISI	I	Serial data input from the bus interface (IC701) (for SONY bus)
46	UNISO	O	Serial data output to the bus interface (IC701) (for SONY bus)
47	VDD	—	Power supply terminal (+5V)
48	AVDD	—	Power supply terminal (+5V) (for A/D converter)
49	AVREF+	I	Reference voltage input terminal (+5V) (for A/D converter)
50	KEYIN1	I	Key input terminal (A/D input) ⏏, INTRO 1, REPEAT 2, SHUF 3, BL SKIP 6, ATA 5, MTL 4, PTY, AF/TA, PRESET DISC +/– keys input (LSW921 to LSW931)
51	KEYIN0	I	Key input terminal (A/D input) OFF, SOURCE, MODE ◀I▶, + ▶▶ ▶▶I SEEK AMS, – I◀◀ ◀◀ SEEK AMS, VOLUME –, SEL, VOLUME +, DSPL, ATT , BTM SENS keys input (LSW901 to LSW911)
52	D-BASS	I	D-BASS switch (SW951) input (A/D input)
53	KEYSEL	I	Setting terminal for the key (fixed at “H”)
54	DSTSEL	I	Destination setting terminal AEP, UK, South European models: fixed at “L”, German, East European models: fixed at “H”
55	RCIN0	I	Rotary remote commander shift key A/D input terminal
56	VSM1	I	Signal meter voltage detection input terminal Not used (fixed at “L”)
57	VSM0	I	FM and AM (MW/LW) signal meter voltage detection input from the FM/AM tuner unit (TU1)
58	AVREF–	I	Reference ground terminal
59	AVSS	—	Ground terminal (for A/D converter)
60	GND	—	Ground terminal
61	$\overline{\text{BUSON}}$	O	Bus on/off control signal output to the bus interface (IC701) (for SONY bus) “L”: bus on
62	$\overline{\text{SYSRST}}$	O	Reset signal output to the bus interface (IC701) (for SONY bus) “L”: reset
63	$\overline{\text{SEKOUT}}$	O	Seek control signal output to the FM/AM tuner unit (TU1)
64	TUNON	O	Tuner system power supply on/off control signal output to the BA3918 (IC601) “H”: tuner on
65	FM ON	O	FM system power supply on/off control signal output to the BA3918 (IC601) “H”: FM on
66	MUT	O	Line muting control signal output terminal “H”: line muting on
67	AF SEK	O	AF seek control signal output terminal Not used (open)
68	COLOR	I	Setting terminal for the illumination color “L”: amber, “H”: green Not used (open)
69	$\overline{\text{NOSESW}}$	I	Detects the removal of the attaching and removing type front panel block “L”: attaching

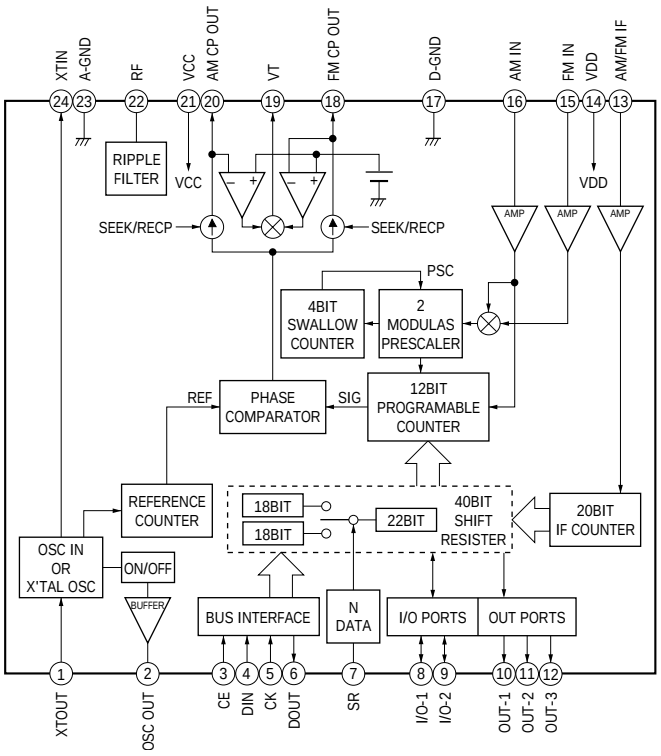
Pin No.	Pin Name	I/O	Function
70	$\overline{\text{ST IN}}$	I/O	Input of FM stereo detection signal from FM/AM tuner unit (TU1), and output of forced monaural control signal to FM/AM tuner unit (TU1) (Commonly used for stereo display input and forced monaural output) FM stereo detection at input of "L", forced monaural at output of "L"
71	SD IN	I	Station detector detect input from the FM/AM tuner unit (TU1) Stop level for SEEK, BTM, etc. is determined SD is present at input of "H"
72	REL T	I	Reel table rotation detect signal input from the take-up and supply reel sensor
73	POS3	I	Tape position detect input from tape operation switch on the mechanism block
74	POS2	I	
75	POS1	I	
76	POS0	I	
77	PW SEL	I	Power select switch (S801) input terminal "L": position A (halt mode), "H": position B (operation mode)
78	$\overline{\text{TELEMUTE}}$	I	Telephone muting signal input terminal At input of "L", the signal is attenuated by –20 dB
79	$\overline{\text{TEST}}$	I	Setting terminal for the test mode "L": test mode (normally fixed at "H")
80	ILLIN	I	Not used (fixed at "L")

*1 loading/tape operation motor control

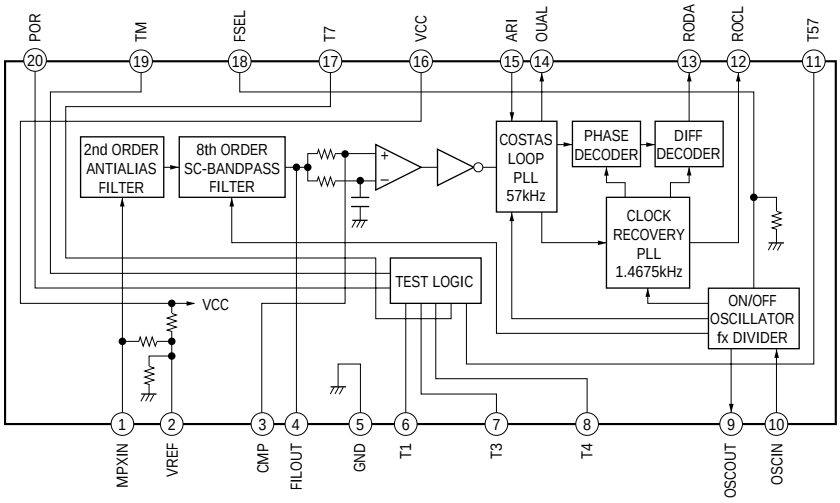
MODE / TERMINAL	STOP	LOADING/ FORWARD	EJECT/ REVERSE	BRAKE
LMLOD (pin ㉒)	"L"	"H"	"L"	"H"
LMEJ (pin ㉓)	"L"	"L"	"H"	"H"

• IC Block Diagrams – MAIN Section –

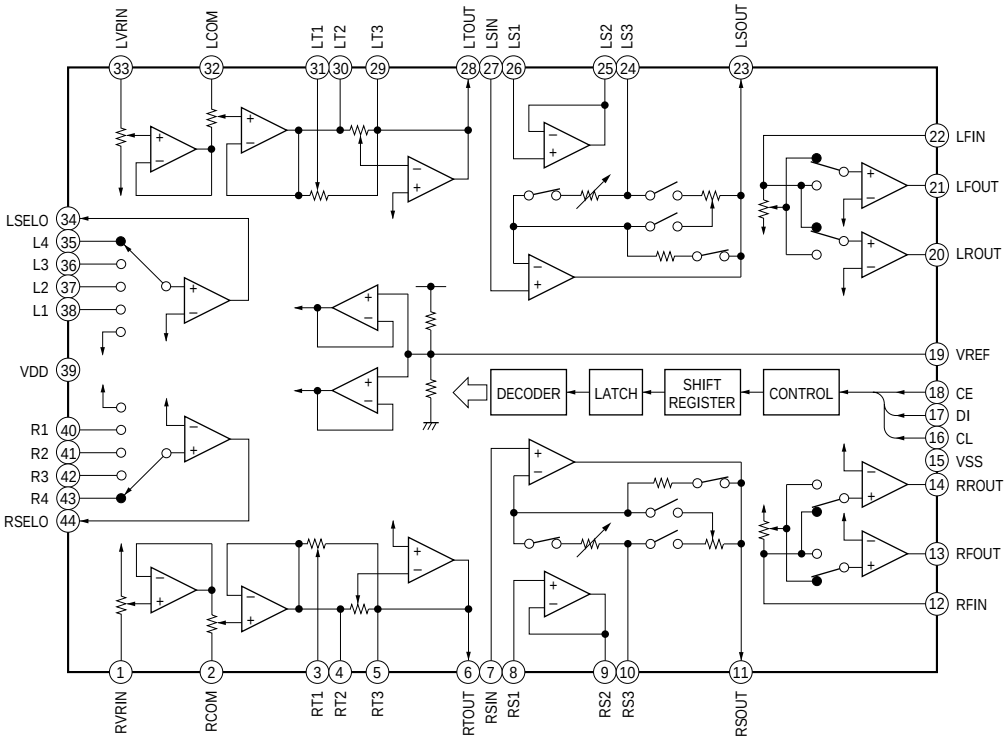
IC1 TB2114F (EL)



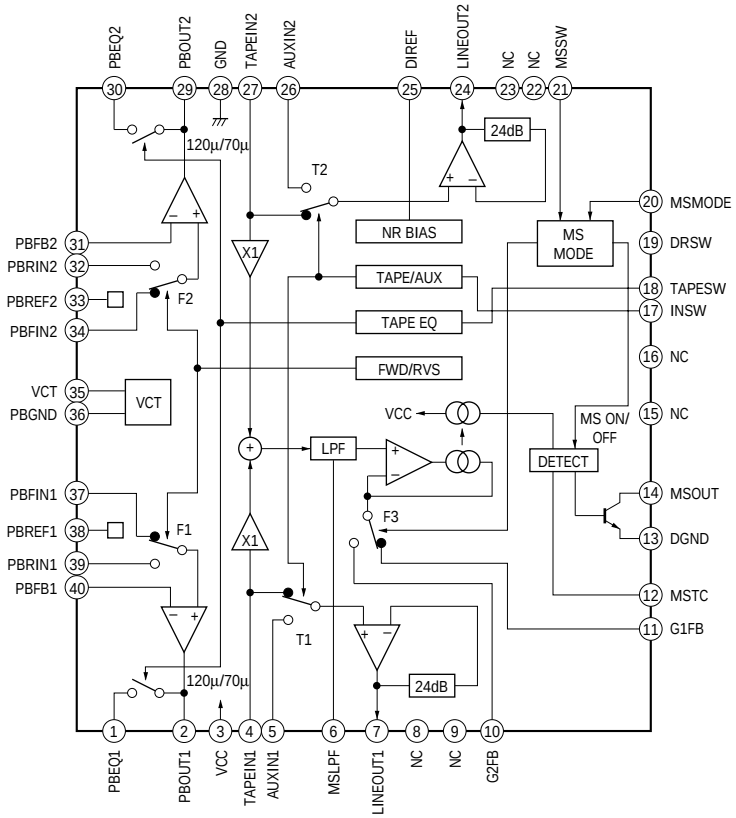
IC3 TDA7330BD-013TR



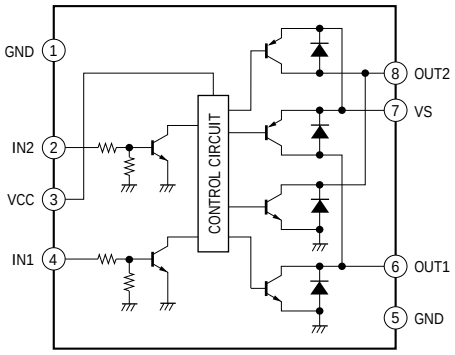
IC151 LC75373ED



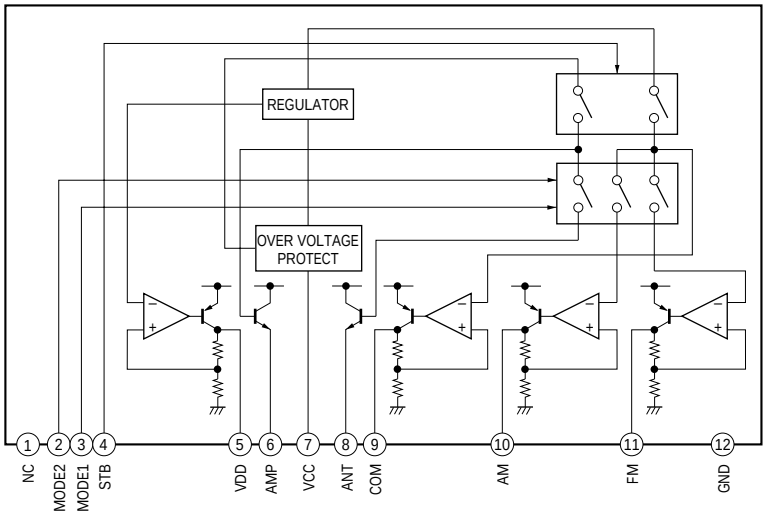
IC351 CXA2509AQ-T4



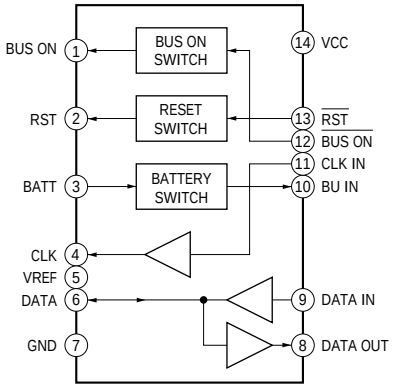
IC360 MM1322XFBE



IC601 BA3918-V2

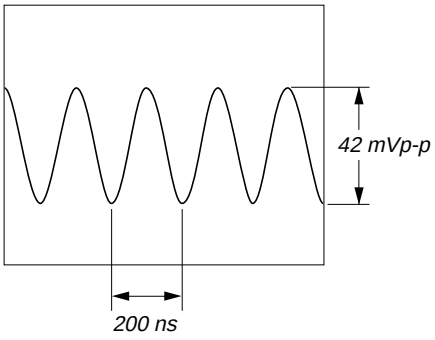


IC701 BA8270F-E2

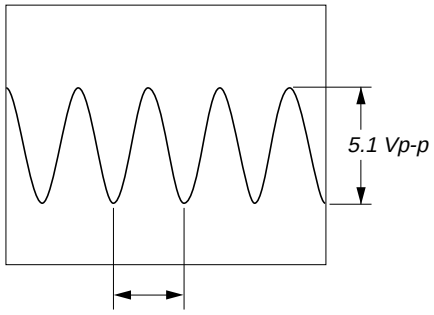


• Waveforms – MAIN Section –

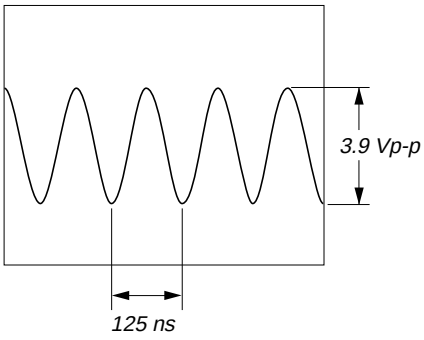
❶ IC1 ① XO



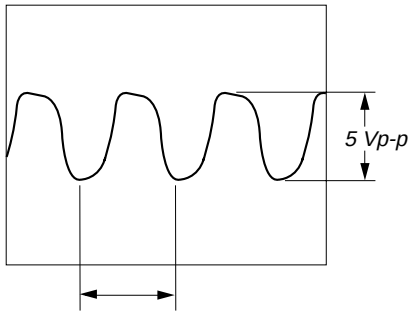
❷ IC3 ⑨ XO



❸ IC501 ⑨ X OUT



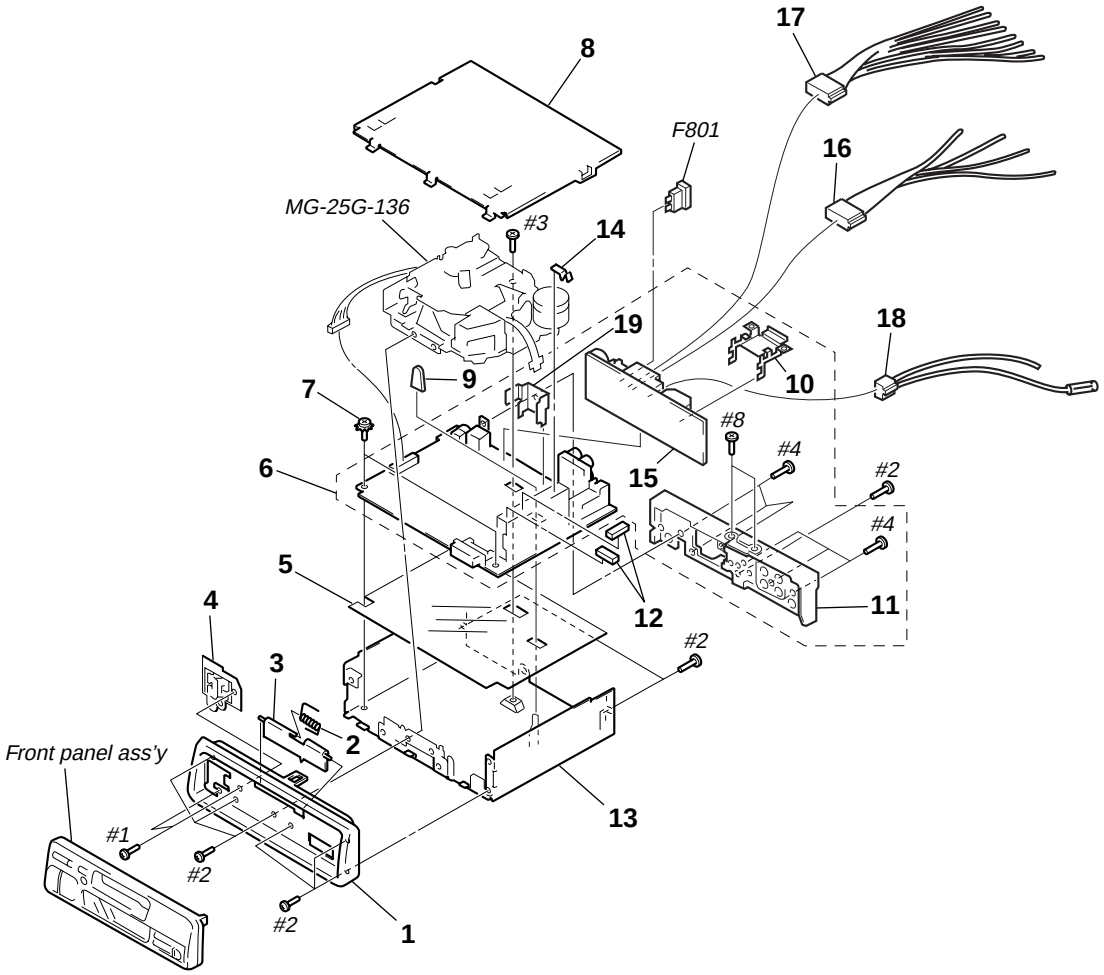
❹ IC501 ⑫ XT OUT



SECTION 7
EXPLODED VIEWS

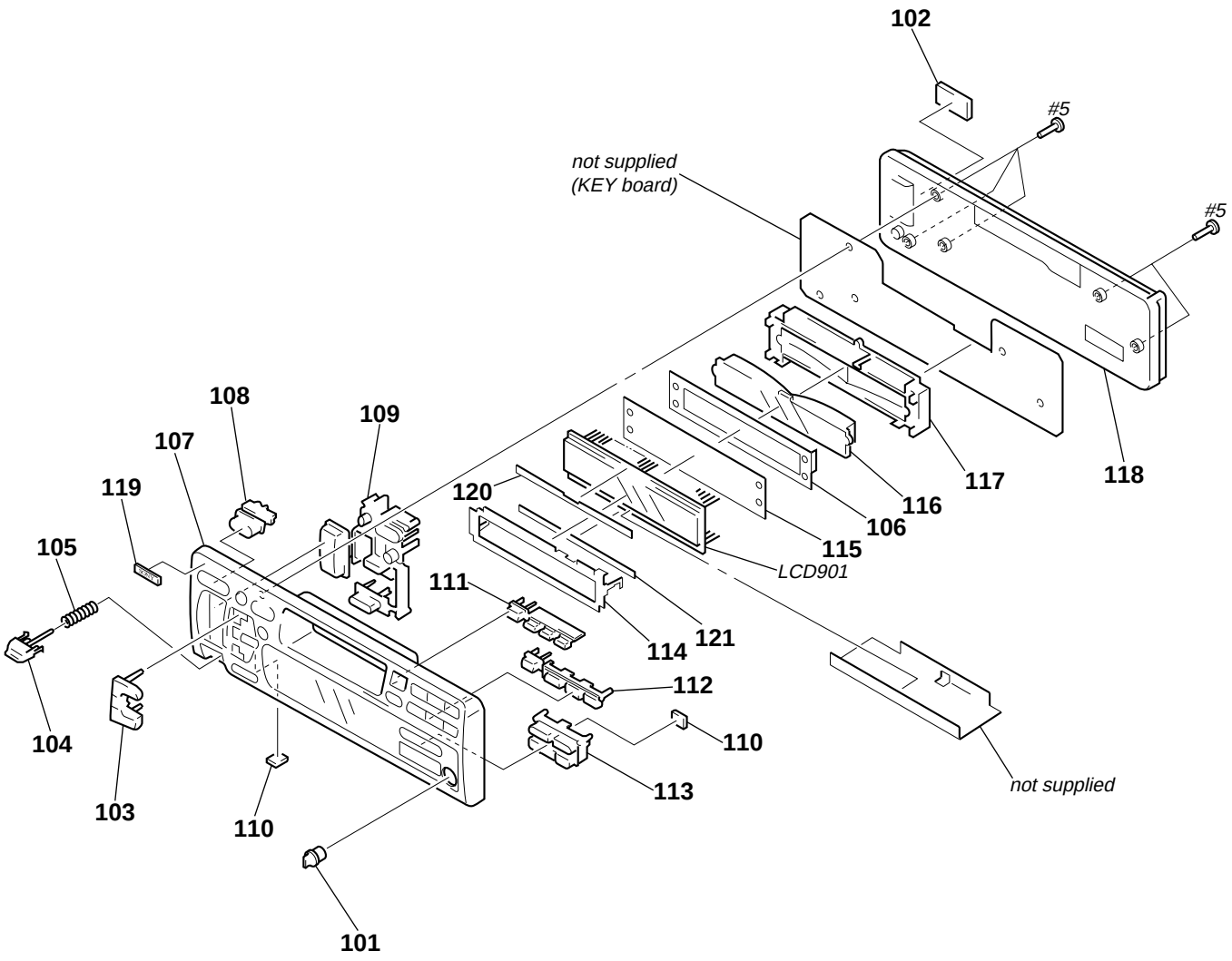
NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

(1) CHASSIS SECTION



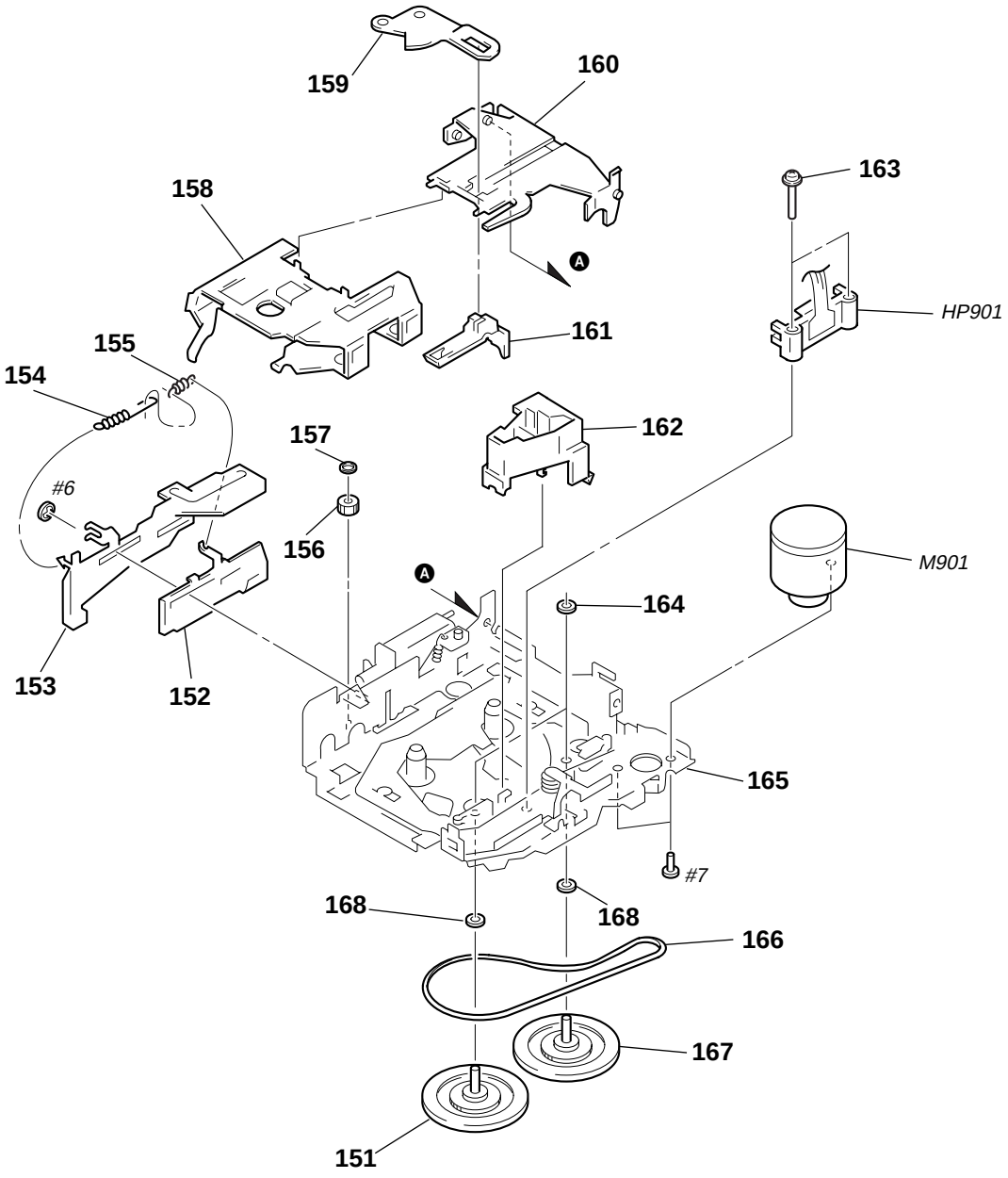
Ref. No.	Part No.	Description	Remark
1	3-009-294-01	PANEL, SUB	
2	3-935-003-01	SPRING, TORSION	
3	3-932-205-21	DOOR, CASSETTE	
4	X-3367-636-1	LOCK ASSY	
* 5	3-009-306-01	SHEET, INSULATING	
* 6	A-3313-459-A	MAIN BOARD, COMPLETE (XR-C5100R: AEP, UK, South European)	
* 6	A-3313-463-A	MAIN BOARD, COMPLETE (XR-C5100R: German)	
* 6	A-3313-475-A	MAIN BOARD, COMPLETE (XR-C5103R)	
7	3-915-923-01	SCREW, GROUND POINT	
* 8	X-3373-269-1	COVER ASSY (ISO)	
9	3-012-859-01	CAP (25), RUBBER	
* 10	3-018-798-01	BRACKET (IC)	
* 11	3-018-613-01	HEAT SINK	
12	3-935-014-01	CUSHION (U)	
* 13	3-009-813-01	CHASSIS	
14	3-937-650-01	PLATE (C), GROUND	
* 15	A-3313-456-A	POWER BOARD, COMPLETE	
16	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)	
17	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S) (SPEAKER)	
18	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)	
* 19	3-019-148-01	BRACKET (HS) (M)	
F801	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	3-018-799-01	BUTTON (D-BASS)	
102	3-015-036-01	CUSHION (BACK PANEL)	
103	3-009-299-01	BUTTON (L) (2) (+. –)	
104	3-009-304-01	BUTTON (RELEASE)	
105	3-932-475-01	SPRING (RELEASE)	
* 106	3-019-149-01	PLATE, LCD	
107	X-3374-680-1	PANEL SUB ASSY (XR-C5100R)	
107	X-3374-681-1	PANEL SUB ASSY (XR-C5103R)	
108	3-009-300-01	BUTTON (SOURCE)	
109	3-009-297-01	BUTTON (L) (●. OFF. + ▶▶I▶▶. SEEK AMS. I◀◀ ◀◀ –. ●. SEL. ATT)	
* 110	3-014-602-01	SPACER (A)	
111	3-009-308-01	BUTTON (1-3) (⏏. 1. 2. 3)	
112	3-009-309-01	BUTTON (4-6) (SENS. 4. 5. 6)	
113	3-009-298-01	BUTTON (R) (PTY. AF/TA. – DISC +)	
* 114	3-019-151-01	PLATE (LCD), GROUND	
* 115	3-019-150-01	SHEET (REFLECTOR)	
* 116	3-018-612-01	PLATE, LIGHT GUIDE	
* 117	3-018-611-01	HOLDER (LCD)	
118	3-009-295-01	PANEL, FRONT BACK	
119	3-904-194-01	EMBLEM (NO. 2.5), SONY	
* 120	3-024-391-01	SHEET (LCD)	
* 121	3-024-846-01	SHEET (LCD) B	
LCD901	1-801-968-11	DISPLAY PANEL, LIQUID CRYSTAL	

(3) MECHANISM DECK SECTION (MG-25G-136)



Ref. No.	Part No.	Description	Remark
151	A-3291-667-A	CLUTCH (FR) ASSY	
* 152	3-019-130-01	LEVER (LDG-A)	
* 153	3-019-131-01	LEVER (LDG-B)	
154	3-020-539-01	SPRING (LD-1), TENSION	
155	3-020-540-01	SPRING (LD-2), TENSION	
156	3-020-542-01	GEAR (LOADING FT)	
157	3-341-753-11	WASHER, POLYETHYLENE	
158	3-020-533-01	HOUSING	
* 159	3-020-532-01	ARM (SUCTION)	
160	3-020-534-01	HANGER	
161	3-933-346-01	CATCHER	
162	3-933-344-01	GUIDE (C)	
163	3-014-798-01	SCREW (HEAD), SPECIAL	
164	3-364-151-01	WASHER	
165	A-3301-267-A	CHASSIS ASSY (G)	
166	3-017-302-01	BELT (25)	
167	3-936-853-01	FLYWHEEL (F)	
168	3-701-437-21	WASHER	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	

KEY

SECTION 8
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		KEY BOARD			
		**********			
*	3-018-611-01	HOLDER (LCD)			
*	3-018-612-01	PLATE, LIGHT GUIDE			
*	3-019-149-01	PLATE, LCD			
*	3-019-150-01	SHEET (REFLECTOR)			
*	3-019-151-01	PLATE (LCD), GROUND			
		< CAPACITOR >			
C901	1-163-033-00	CERAMIC CHIP	0.022uF		50V
C902	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C903	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C904	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
CN901	1-764-423-11	PIN, CONNECTOR 12P			
		< DIODE >			
D901	8-719-420-90	DIODE MA8051-M			
D902	8-719-422-64	DIODE MA8062-M			
D903	8-719-422-64	DIODE MA8062-M			
D904	8-719-422-64	DIODE MA8062-M			
D905	8-719-422-64	DIODE MA8062-M			
		< IC >			
IC901	8-759-365-90	IC LC75824W			
		< SHORT >			
JC901	1-216-295-00	SHORT (CHIP) 0			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-801-968-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< SWITCH >			
LSW901	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (OFF)			
LSW902	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SOURCE)			
LSW903	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (MODE/◀I▶)			
LSW904	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (+ ▶▶I▶▶, SEEK/AMS)			
LSW905	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SEEK/AMS, I◀◀ ◀◀ –)			
LSW906	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (–)			
LSW907	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SEL)			
LSW908	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (+)			
LSW909	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (DSPL)			
LSW910	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (ATT)			
LSW911	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (BTM/SENS)			
LSW921	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (⏏)			
LSW922	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (INTRO/1)			
LSW923	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (REPEAT/2)			
LSW924	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SHUF/3)			
LSW925	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (BL SKIP/6)			
LSW926	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (ATA/5)			
LSW927	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (MTL/4)			
LSW928	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (PTY)			
LSW929	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (AF/TA)			
LSW930	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (PRESET +/DISC +)			
LSW931	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (– PRESET/– DISC)			
		< PILOT LAMP >			
PL903	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)			
PL904	1-517-633-21	LAMP, PILOT (LCD BACK LIGHT)			
		< TRANSISTOR >			
Q901	8-729-106-60	TRANSISTOR 2SB1115A			
Q902	8-729-106-60	TRANSISTOR 2SB1115A			
Q903	8-729-900-53	TRANSISTOR DTC114EK			
Q904	8-729-900-53	TRANSISTOR DTC114EK			
		< RESISTOR >			
R901	1-216-045-00	METAL CHIP	680	5%	1/10W
R902	1-216-045-00	METAL CHIP	680	5%	1/10W
R903	1-216-045-00	METAL CHIP	680	5%	1/10W
R904	1-216-049-11	RES, CHIP	1K	5%	1/10W
R905	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R906	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R907	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R908	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R909	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R910	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R921	1-216-045-00	METAL CHIP	680	5%	1/10W

Ref. No.	Part No.	Description			Remark
R922	1-216-045-00	METAL CHIP	680	5%	1/10W
R923	1-216-045-00	METAL CHIP	680	5%	1/10W
R924	1-216-049-11	RES, CHIP	1K	5%	1/10W
R925	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R926	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R927	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R928	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R929	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R930	1-216-295-00	SHORT (CHIP)	0		
R931	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R932	1-216-073-00	METAL CHIP	10K	5%	1/10W
R951	1-216-041-00	METAL CHIP	470	5%	1/10W
R952	1-216-109-00	METAL CHIP	330K	5%	1/10W
R953	1-216-049-11	RES, CHIP	1K	5%	1/10W
R954	1-216-049-11	RES, CHIP	1K	5%	1/10W
R955	1-216-049-11	RES, CHIP	1K	5%	1/10W
R956	1-216-049-11	RES, CHIP	1K	5%	1/10W
R957	1-216-073-00	METAL CHIP	10K	5%	1/10W
R958	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R959	1-216-073-00	METAL CHIP	10K	5%	1/10W
R960	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R961	1-216-037-00	METAL CHIP	330	5%	1/10W
R962	1-216-033-00	METAL CHIP	220	5%	1/10W
R963	1-216-029-00	METAL CHIP	150	5%	1/10W
R964	1-216-025-00	RES, CHIP	100	5%	1/10W
R965	1-216-037-00	METAL CHIP	330	5%	1/10W
R966	1-216-033-00	METAL CHIP	220	5%	1/10W
R967	1-216-029-00	METAL CHIP	150	5%	1/10W
R968	1-216-021-00	METAL CHIP	68	5%	1/10W
R969	1-216-029-00	METAL CHIP	150	5%	1/10W
R970	1-216-021-00	METAL CHIP	68	5%	1/10W
R971	1-216-029-00	METAL CHIP	150	5%	1/10W
R972	1-216-021-00	METAL CHIP	68	5%	1/10W
R981	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R982	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R983	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R984	1-216-081-00	METAL CHIP	22K	5%	1/10W
		< SWITCH >			
SW951	1-762-937-11	SWITCH, ROTARY (D-BASS)			
**********					
*	A-3313-459-A	MAIN BOARD, COMPLETE (XR-C5100R:AEP, UK, South European)			
*	A-3313-463-A	MAIN BOARD, COMPLETE (XR-C5100R: German)			
*	A-3313-475-A	MAIN BOARD, COMPLETE (XR-C5103R)			
		**********			
		(Including POWER BOARD, COMPLETE)			
*	3-018-613-01	HEAT SINK			
*	3-018-798-01	BRACKET (IC)			
*	3-019-148-01	BRACKET (HS) (M)			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
	7-685-796-09	SCREW +PTT 2.6X14 (S)			
		< CAPACITOR >			
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C2	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C3	1-126-157-11	ELECT	10uF	20%	16V

Ref. No.	Part No.	Description			Remark
C4	1-126-157-11	ELECT	10uF	20%	16V
C5	1-126-157-11	ELECT	10uF	20%	16V
C6	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C9	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C11	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C12	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C13	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C14	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C15	1-124-584-00	ELECT	100uF	20%	10V
C16	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C17	1-124-463-00	ELECT	0.1uF	20%	50V
C18	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C19	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C20	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C21	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C22	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C23	1-126-933-11	ELECT	100uF	20%	16V
C24	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C25	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C26	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C28	1-126-157-11	ELECT	10uF	20%	16V
C29	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C30	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C31	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C32	1-126-160-11	ELECT	1uF	20%	50V
C34	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C35	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C36	1-163-251-11	CERAMIC CHIP	100PF	5%	50V (XR-C5100R)
C38	1-124-584-00	ELECT	100uF	20%	10V (XR-C5103R)
C39	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (XR-C5103R)
C101	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C102	1-126-160-11	ELECT	1uF	20%	50V
C103	1-126-160-11	ELECT	1uF	20%	50V
C111	1-126-160-11	ELECT	1uF	20%	50V
C112	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C113	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C114	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C115	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C116	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C118	1-126-157-11	ELECT	10uF	20%	16V
C119	1-126-157-11	ELECT	10uF	20%	16V
C120	1-126-157-11	ELECT	10uF	20%	16V
C121	1-126-157-11	ELECT	10uF	20%	16V
C122	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C123	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C124	1-126-096-11	ELECT	10uF	20%	35V
C151	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C152	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C153	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C155	1-124-234-00	ELECT	22uF	20%	16V
C157	1-124-584-00	ELECT	100uF	20%	10V
C158	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C201	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C202	1-126-160-11	ELECT	1uF	20%	50V
C203	1-126-160-11	ELECT	1uF	20%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C211	1-126-160-11	ELECT	1uF	20%	50V
C212	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C213	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C214	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C215	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C216	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V
C218	1-126-157-11	ELECT	10uF	20%	16V
C219	1-126-157-11	ELECT	10uF	20%	16V
C220	1-126-157-11	ELECT	10uF	20%	16V
C221	1-126-157-11	ELECT	10uF	20%	16V
C222	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C223	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C224	1-126-096-11	ELECT	10uF	20%	35V
C301	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C302	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C303	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C304	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C305	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C308	1-126-160-11	ELECT	1uF	20%	50V
C309	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C310	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C350	1-124-234-00	ELECT	22uF	20%	16V
C351	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C353	1-124-465-00	ELECT	0.47uF	20%	50V
C354	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C356	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C357	1-124-584-00	ELECT	100uF	20%	10V
C362	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C363	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C365	1-126-157-11	ELECT	10uF	20%	16V
C366	1-126-157-11	ELECT	10uF	20%	16V
C367	1-126-934-11	ELECT	220uF	20%	16V
C401	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C402	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C403	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C404	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C405	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C408	1-126-160-11	ELECT	1uF	20%	50V
C409	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C410	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C501	1-124-584-00	ELECT	100uF	20%	10V
C502	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C503	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C504	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C505	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C506	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C507	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C582	1-124-257-00	ELECT	2.2uF	20%	50V
C583	1-124-589-11	ELECT	47uF	20%	16V
C584	1-163-133-11	CERAMIC CHIP	470PF	5%	50V
C601	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C603	1-125-710-11	DOUBLE LAYER	0.1F		5.5V
C605	1-126-157-11	ELECT	10uF	20%	16V
C606	1-126-157-11	ELECT	10uF	20%	16V
C607	1-126-157-11	ELECT	10uF	20%	16V
C609	1-124-589-11	ELECT	47uF	20%	16V
C610	1-124-234-00	ELECT	22uF	20%	16V

Ref. No.	Part No.	Description			Remark
C612	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C614	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C615	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C617	1-126-157-11	ELECT	10uF	20%	16V
C618	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C650	1-126-936-11	ELECT	3300uF	20%	16V
C660	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C701	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C702	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C703	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C704	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
		< CONNECTOR >			
CN351	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P			
* CN352	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P			
CN602	1-764-422-11	PLUG, CONNECTOR 12P			
CN701	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)			
		< JACK >			
CNJ150	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN/LINE OUT REAR)			
		< CONPOSITION CIRCUIT BLOCK >			
* CP1	1-517-422-11	GAP, SPARK			
		< DIODE >			
D2	8-719-991-65	DIODE SB02W03C			
D3	8-719-423-07	DIODE MA8100-L-TX			
D4	8-719-422-64	DIODE MA8062-M			
D150	8-719-057-80	DIODE MA8160-M-TX			
D151	8-719-057-80	DIODE MA8160-M-TX			
D152	8-719-057-80	DIODE MA8160-M-TX			
D350	8-719-404-49	DIODE MA111			
D361	8-719-423-07	DIODE MA8100-L-TX			
D362	8-719-911-19	DIODE 1SS119			
D501	8-719-422-12	DIODE MA8039			
D504	8-719-400-20	DIODE MA152WA			
D506	8-719-911-19	DIODE 1SS119			
D583	8-719-404-49	DIODE MA111			
D584	8-719-422-12	DIODE MA8039			
D601	8-719-423-32	DIODE MA8120-M			
D605	8-719-977-03	DIODE DTZ5.6B			
D606	8-719-017-67	DIODE MA8068H			
D607	8-719-801-78	DIODE 1SS184			
D609	8-719-422-64	DIODE MA8062-M			
D610	8-719-422-64	DIODE MA8062-M			
D611	8-719-109-97	DIODE RD6.8ES-B2			
D612	8-719-109-97	DIODE RD6.8ES-B2			
D613	8-719-034-94	DIODE MA4180-M(QZ)			
D614	8-719-109-97	DIODE RD6.8ES-B2			
D615	8-719-109-97	DIODE RD6.8ES-B2			
D616	8-719-422-64	DIODE MA8062-M			
D617	8-719-422-64	DIODE MA8062-M			
D621	8-719-970-02	DIODE 1SR139-400			
D622	8-719-970-02	DIODE 1SR139-400			
D623	8-719-970-02	DIODE 1SR139-400			
D624	8-719-404-49	DIODE MA111			

Ref. No.	Part No.	Description	Remark
D651	8-719-018-04	DIODE MA8240-TX	
D652	8-719-018-04	DIODE MA8240-TX	
D653	8-719-422-76	DIODE MA8075-M	
D660	8-719-422-64	DIODE MA8062-M	
D661	8-719-404-49	DIODE MA111	
D662	8-719-422-64	DIODE MA8062-M	
D701	8-719-057-80	DIODE MA8160-M-TX	
D703	8-719-422-67	DIODE MA8062-H	
D704	8-719-422-64	DIODE MA8062-M	
D705	8-719-057-80	DIODE MA8160-M-TX	
D706	8-719-057-80	DIODE MA8160-M-TX	
		< IC >	
IC1	8-759-448-88	IC TB2114F(EL)	
IC3	8-759-163-63	IC TDA7330BD-013TR	
IC151	8-759-443-67	IC LC75373ED	
IC351	8-752-079-78	IC CXA2509AQ-T4	
IC360	8-759-395-97	IC MM1322XFBE	
IC501	8-759-492-39	IC MN1886426SA (XR-C5100R)	
IC501	8-759-492-41	IC MN1886426SB (XR-C5103R)	
IC571	8-759-363-81	IC XC61AN4002PR	
IC601	8-759-347-49	IC BA3918-V2	
IC701	8-759-449-89	IC BA8270F-E2	
		< JACK >	
J1	1-764-808-14	JACK (FM/AM ANTENNA)	
J501	1-566-822-41	JACK (REMOTE IN)	
		< SHORT >	
JC5	1-216-295-00	SHORT (CHIP) 0	
JC7	1-216-295-00	SHORT (CHIP) 0	
JC8	1-216-295-00	SHORT (CHIP) 0	
JC9	1-216-295-00	SHORT (CHIP) 0	
JC10	1-216-295-00	SHORT (CHIP) 0	
JC11	1-216-295-00	SHORT (CHIP) 0	
JC14	1-216-295-00	SHORT (CHIP) 0	
JC15	1-216-295-00	SHORT (CHIP) 0	
JC16	1-216-295-00	SHORT (CHIP) 0	
JC17	1-216-295-00	SHORT (CHIP) 0	
JC18	1-216-295-00	SHORT (CHIP) 0	
JC20	1-216-295-00	SHORT (CHIP) 0	
JC21	1-216-295-00	SHORT (CHIP) 0	
JC22	1-216-295-00	SHORT (CHIP) 0	
JC23	1-216-295-00	SHORT (CHIP) 0	
JC24	1-216-295-00	SHORT (CHIP) 0	
JC27	1-216-295-00	SHORT (CHIP) 0	
JC28	1-216-295-00	SHORT (CHIP) 0	
JC29	1-216-295-00	SHORT (CHIP) 0	
JC30	1-216-295-00	SHORT (CHIP) 0	
JC31	1-216-295-00	SHORT (CHIP) 0	
JC32	1-216-295-00	SHORT (CHIP) 0	
JC33	1-216-295-00	SHORT (CHIP) 0	
JC34	1-216-295-00	SHORT (CHIP) 0	
JC35	1-216-295-00	SHORT (CHIP) 0	
JC36	1-216-295-00	SHORT (CHIP) 0	
JC37	1-216-295-00	SHORT (CHIP) 0	
JC38	1-216-295-00	SHORT (CHIP) 0	
JC40	1-216-295-00	SHORT (CHIP) 0	

Ref. No.	Part No.	Description	Remark
JC50	1-216-296-00	SHORT (CHIP) 0	
JC51	1-216-296-00	SHORT (CHIP) 0	
JC52	1-216-296-00	SHORT (CHIP) 0	
JC53	1-216-296-00	SHORT (CHIP) 0	
JC54	1-216-296-00	SHORT (CHIP) 0	
JC56	1-216-296-00	SHORT (CHIP) 0	
JC57	1-216-296-00	SHORT (CHIP) 0	
JC58	1-216-296-00	SHORT (CHIP) 0	
JC59	1-216-296-00	SHORT (CHIP) 0	
JC60	1-216-296-00	SHORT (CHIP) 0	
JC62	1-216-296-00	SHORT (CHIP) 0	
JC63	1-216-296-00	SHORT (CHIP) 0	
JC65	1-216-296-00	SHORT (CHIP) 0	
JC66	1-216-296-00	SHORT (CHIP) 0	
JC67	1-216-296-00	SHORT (CHIP) 0	
JC68	1-216-296-00	SHORT (CHIP) 0	
JC69	1-216-296-00	SHORT (CHIP) 0	
JC70	1-216-296-00	SHORT (CHIP) 0	
JC71	1-216-296-00	SHORT (CHIP) 0	
JC72	1-216-296-00	SHORT (CHIP) 0	
JC73	1-216-296-00	SHORT (CHIP) 0	
JC74	1-216-296-00	SHORT (CHIP) 0	
JC75	1-216-296-00	SHORT (CHIP) 0	
JC76	1-216-296-00	SHORT (CHIP) 0	
JC77	1-216-296-00	SHORT (CHIP) 0	
JC78	1-216-296-00	SHORT (CHIP) 0	
JC79	1-216-296-00	SHORT (CHIP) 0	
JC80	1-216-296-00	SHORT (CHIP) 0	
JC81	1-216-296-00	SHORT (CHIP) 0	
		< COIL >	
L1	1-412-006-31	INDUCTOR CHIP 10uH	
L2	1-410-509-11	INDUCTOR 10uH	
L4	1-410-509-11	INDUCTOR 10uH	
L501	1-410-509-11	INDUCTOR 10uH	
		< TRANSISTOR >	
Q2	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3	8-729-907-28	TRANSISTOR IMD3	
Q101	8-729-920-21	TRANSISTOR DTC314TKH04	
Q102	8-729-920-21	TRANSISTOR DTC314TKH04	
Q103	8-729-920-21	TRANSISTOR DTC314TKH04	
Q201	8-729-920-21	TRANSISTOR DTC314TKH04	
Q202	8-729-920-21	TRANSISTOR DTC314TKH04	
Q203	8-729-920-21	TRANSISTOR DTC314TKH04	
Q361	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	
Q362	8-729-020-67	TRANSISTOR XN1A312-TX	
Q364	8-729-106-60	TRANSISTOR 2SB1115A	
Q365	8-729-900-53	TRANSISTOR DTC114EK	
Q501	8-729-020-67	TRANSISTOR XN1A312-TX	
Q503	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q581	8-729-020-67	TRANSISTOR XN1A312-TX	
Q603	8-729-423-99	TRANSISTOR 2SD2137-OP	
Q605	8-729-020-67	TRANSISTOR XN1A312-TX	
Q606	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q608	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q609	8-729-015-11	TRANSISTOR 2SD1802FAST-TL	

MAIN

Ref. No.	Part No.	Description			Remark
Q610	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q701	8-729-900-53	TRANSISTOR	DTC114EK		
		< RESISTOR >			
R1	1-216-049-11	RES, CHIP	1K	5%	1/10W
R2	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R3	1-216-073-00	METAL CHIP	10K	5%	1/10W
R4	1-216-097-00	RES, CHIP	100K	5%	1/10W
R5	1-216-017-00	RES, CHIP	47	5%	1/10W
R6	1-216-077-00	METAL CHIP	15K	5%	1/10W
R7	1-216-075-00	METAL CHIP	12K	5%	1/10W
R8	1-216-025-00	RES, CHIP	100	5%	1/10W
R9	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R11	1-216-049-11	RES, CHIP	1K	5%	1/10W
R14	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R15	1-216-073-00	METAL CHIP	10K	5%	1/10W
R16	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R17	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R18	1-216-049-11	RES, CHIP	1K	5%	1/10W
R19	1-216-073-00	METAL CHIP	10K	5%	1/10W
R101	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R102	1-216-085-00	METAL CHIP	33K	5%	1/10W
R103	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R104	1-216-190-00	RES, CHIP	470	5%	1/8W
R105	1-216-190-00	RES, CHIP	470	5%	1/8W
R108	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R109	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R110	1-216-089-00	RES, CHIP	47K	5%	1/10W
R111	1-216-089-00	RES, CHIP	47K	5%	1/10W
R112	1-216-121-00	METAL CHIP	1M	5%	1/10W
R113	1-216-121-00	METAL CHIP	1M	5%	1/10W
R118	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R119	1-216-073-00	METAL CHIP	10K	5%	1/10W
R151	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R201	1-216-214-00	RES, CHIP	4.7K	5%	1/8W
R202	1-216-085-00	METAL CHIP	33K	5%	1/10W
R203	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R204	1-216-041-00	METAL CHIP	470	5%	1/10W
R205	1-216-041-00	METAL CHIP	470	5%	1/10W
R208	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R209	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R210	1-216-089-00	RES, CHIP	47K	5%	1/10W
R211	1-216-089-00	RES, CHIP	47K	5%	1/10W
R212	1-216-121-00	METAL CHIP	1M	5%	1/10W
R213	1-216-121-00	METAL CHIP	1M	5%	1/10W
R218	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R219	1-216-073-00	METAL CHIP	10K	5%	1/10W
R303	1-216-077-00	METAL CHIP	15K	5%	1/10W
R304	1-216-081-00	METAL CHIP	22K	5%	1/10W
R305	1-216-109-00	METAL CHIP	330K	5%	1/10W
R306	1-216-190-00	RES, CHIP	470	5%	1/8W
R307	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R308	1-216-073-00	METAL CHIP	10K	5%	1/10W
R351	1-208-812-11	RES, CHIP	18K	2%	1/10W
R352	1-216-105-00	RES, CHIP	220K	5%	1/10W
R353	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R354	1-216-077-00	METAL CHIP	15K	5%	1/10W
R355	1-216-009-00	METAL CHIP	22	5%	1/10W

Ref. No.	Part No.	Description			Remark
R361	1-216-049-11	RES, CHIP	1K	5%	1/10W
R362	1-249-389-11	CARBON	4.7	5%	1/4W
R363	1-249-389-11	CARBON	4.7	5%	1/4W
R364	1-216-073-00	METAL CHIP	10K	5%	1/10W
R365	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R403	1-216-077-00	METAL CHIP	15K	5%	1/10W
R404	1-216-081-00	METAL CHIP	22K	5%	1/10W
R405	1-216-109-00	METAL CHIP	330K	5%	1/10W
R406	1-216-190-00	RES, CHIP	470	5%	1/8W
R407	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R408	1-216-073-00	METAL CHIP	10K	5%	1/10W
R501	1-216-097-00	RES, CHIP	100K	5%	1/10W
R505	1-216-049-11	RES, CHIP	1K	5%	1/10W
R506	1-216-109-00	METAL CHIP	330K	5%	1/10W
R507	1-216-198-00	RES, CHIP	1K	5%	1/8W
R508	1-216-206-00	RES, CHIP	2.2K	5%	1/8W
R509	1-216-198-00	RES, CHIP	1K	5%	1/8W
R510	1-216-097-00	RES, CHIP	100K	5%	1/10W
R511	1-216-097-00	RES, CHIP	100K	5%	1/10W
R512	1-216-097-00	RES, CHIP	100K	5%	1/10W
R513	1-216-097-00	RES, CHIP	100K	5%	1/10W
R514	1-216-198-00	RES, CHIP	1K	5%	1/8W
R515	1-216-198-00	RES, CHIP	1K	5%	1/8W
R516	1-216-198-00	RES, CHIP	1K	5%	1/8W
R517	1-216-198-00	RES, CHIP	1K	5%	1/8W
R518	1-216-246-00	RES, CHIP	100K	5%	1/8W
R521	1-216-246-00	RES, CHIP	100K	5%	1/8W
R522	1-216-097-00	RES, CHIP	100K	5%	1/10W
R523	1-216-097-00	RES, CHIP	100K	5%	1/10W
R524	1-216-097-00	RES, CHIP	100K	5%	1/10W
R525	1-216-097-00	RES, CHIP	100K	5%	1/10W
R526	1-216-097-00	RES, CHIP	100K	5%	1/10W
R528	1-216-097-00	RES, CHIP	100K	5%	1/10W
R531	1-216-246-00	RES, CHIP	100K	5%	1/8W
R533	1-216-246-00	RES, CHIP	100K	5%	1/8W
R535	1-216-097-00	RES, CHIP	100K	5%	1/10W
R537	1-216-097-00	RES, CHIP	100K	5%	1/10W (XR-C5100R: German)
R537	1-216-699-11	METAL CHIP	100K	0.5%	1/10W (XR-C5103R)
R538	1-216-246-00	RES, CHIP	100K	5%	1/8W (XR-C5100R: AEP, UK, South European, XR-C5103R)
R539	1-208-806-11	RES, CHIP	10K	0.5%	1/10W
R540	1-216-097-00	RES, CHIP	100K	5%	1/10W
R544	1-216-049-11	RES, CHIP	1K	5%	1/10W
R545	1-216-097-00	RES, CHIP	100K	5%	1/10W
R546	1-216-097-00	RES, CHIP	100K	5%	1/10W
R548	1-216-222-00	RES, CHIP	10K	5%	1/8W
R549	1-216-222-00	RES, CHIP	10K	5%	1/8W
R550	1-216-073-00	METAL CHIP	10K	5%	1/10W
R551	1-249-429-11	CARBON	10K	5%	1/4W
R562	1-216-097-00	RES, CHIP	100K	5%	1/10W
R582	1-216-198-00	RES, CHIP	1K	5%	1/8W
R583	1-216-166-00	RES, CHIP	47	5%	1/8W
R584	1-216-238-00	RES, CHIP	47K	5%	1/8W
R585	1-216-097-00	RES, CHIP	100K	5%	1/10W
R601	1-216-057-00	METAL CHIP	2.2K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R602	1-216-097-00	RES, CHIP	100K	5%	1/10W
R603	1-216-089-00	RES, CHIP	47K	5%	1/10W
R604	1-216-089-00	RES, CHIP	47K	5%	1/10W
R606	1-216-206-00	RES, CHIP	2.2K	5%	1/8W
R607	1-216-073-00	METAL CHIP	10K	5%	1/10W
R608	1-216-097-00	RES, CHIP	100K	5%	1/10W
R609	1-216-037-00	METAL CHIP	330	5%	1/10W
R610	1-216-073-00	METAL CHIP	10K	5%	1/10W
R612	1-216-025-00	RES, CHIP	100	5%	1/10W
R613	1-216-025-00	RES, CHIP	100	5%	1/10W
R614	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R615	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R616	1-216-295-00	SHORT (CHIP)	0		
R617	1-216-025-00	RES, CHIP	100	5%	1/10W
R618	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R619	1-208-806-11	RES, CHIP	10K	0.50%	1/10W
R620	1-216-025-00	RES, CHIP	100	5%	1/10W
R621	1-216-025-00	RES, CHIP	100	5%	1/10W
R624	1-249-383-11	CARBON	1.5	5%	1/6W
R625	1-249-383-11	CARBON	1.5	5%	1/6W
R626	1-249-383-11	CARBON	1.5	5%	1/6W
R627	1-249-383-11	CARBON	1.5	5%	1/6W
R660	1-216-198-00	RES, CHIP	1K	5%	1/8W
R661	1-216-129-00	METAL CHIP	2.2M	5%	1/10W
R704	1-216-246-00	RES, CHIP	100K	5%	1/8W
R705	1-216-073-00	METAL CHIP	10K	5%	1/10W
R706	1-216-025-00	RES, CHIP	100	5%	1/10W
R707	1-216-174-00	RES, CHIP	100	5%	1/8W
R708	1-216-017-00	RES, CHIP	47	5%	1/10W
		< VARIABLE RESISTOR >			
RV1	1-241-768-11	RES, ADJ, CARBON 220K			
		< SWITCH >			
S601	1-692-431-21	SWITCH, TACTILE (RESET)			
		< TUNER >			
TU1	1-693-373-11	TUNER UNIT FAE338-A01 (FM/AM) (XR-C5100R)			
TU1	A-3282-031-A	TUNER UNIT TUX-006/2 (EE) (FM/AM) (XR-C5103R)			
		< VIBRATOR >			
X1	1-567-848-11	VIBRATOR, CRYSTAL (7.2MHz)			
X2	1-579-242-41	VIBRATOR, CRYSTAL (4.332MHz)			
X501	1-579-125-11	VIBRATOR, CERAMIC (8MHz)			
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
*	A-3313-456-A	POWER BOARD, COMPLETE			
		**********			
		(Included in MAIN BOARD, COMPLETE)			
		< CAPACITOR >			
C801	1-126-096-11	ELECT	10uF	20%	25V
C802	1-126-096-11	ELECT	10uF	20%	25V
C803	1-124-589-11	ELECT	47uF	20%	16V
C804	1-124-589-11	ELECT	47uF	20%	16V
C805	1-136-165-00	FILM	0.1uF	5%	50V
C807	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C811	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C812	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C813	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C814	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C821	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C822	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C823	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C824	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
		< CONNECTOR >			
CN801	1-778-985-11	PIN, CONNECTOR (ISO)			
CN802	1-778-983-11	PIN, CONNECTOR (PC BOARD) 13P			
CN803	1-778-983-11	PIN, CONNECTOR (PC BOARD) 13P			
		< DIODE >			
D801	8-719-049-38	DIODE 1N5404TU			
D813	8-719-970-02	DIODE 1SR139-400			
D814	8-719-970-02	DIODE 1SR139-400			
D815	8-719-970-02	DIODE 1SR139-400			
D816	8-719-970-02	DIODE 1SR139-400			
D823	8-719-970-02	DIODE 1SR139-400			
D824	8-719-970-02	DIODE 1SR139-400			
D825	8-719-970-02	DIODE 1SR139-400			
D826	8-719-970-02	DIODE 1SR139-400			
		< IC >			
IC801	8-759-490-74	IC TDA7384			
		< SHORT >			
JC801	1-216-296-00	SHORT (CHIP) 0			
JC802	1-216-296-00	SHORT (CHIP) 0			
JC803	1-216-295-00	SHORT (CHIP) 0			
		< COIL >			
L801	1-416-046-11	INDUCTOR 400uH			
		< RESISTOR >			
R801	1-216-198-00	RES, CHIP	1K	5%	1/8W
R802	1-216-198-00	RES, CHIP	1K	5%	1/8W
R803	1-216-049-11	RES, CHIP	1K	5%	1/10W
R804	1-216-049-11	RES, CHIP	1K	5%	1/10W
		< SWITCH >			
S801	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
**********					
		MISCELLANEOUS			
		**********			
16	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)			
17	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S) (SPEAKER)			
18	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)			
F801	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)			
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)			
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)			
**********					

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-772-10	SCREW +B 2X4	
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#3	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#5	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
#6	7-624-104-04	STOP RING 2.0, TYPE-E	
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3	
#8	7-685-796-09	SCREW +PTT 2.6X14 (S)	
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		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-473-067-71	REMOTE COMMANDER (RM-X4S)	
	3-861-721-11	MANUAL, INSTRUCTION (ENGLISH, SPANISH, SWEDISH, PORTUGUESE)(XR-C5100R: AEP, UK)	
	3-861-721-21	MANUAL, INSTRUCTION (GERMAN, FRENCH, DUTCH, ITALIAN) (XR-C5100R: AEP)	
	3-861-721-31	MANUAL, INSTRUCTION (POLISH, TURKISH, CZECH, GREEK, ENGLISH) (XR-C5100R: South European)	
	3-861-721-41	MANUAL, INSTRUCTION (GERMAN) (XR-C5100R: German)	
	3-861-722-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (XR-C5100R: AEP, UK)	
	3-861-722-21	MANUAL, INSTRUCTION, INSTALL (GERMAN, FRENCH, DUTCH, ITALIAN) (XR-C5100R: AEP, German)	
	3-861-722-31	MANUAL, INSTRUCTION, INSTALL (POLISH, TURKISH, CZECH, GREEK, ENGLISH) (XR-C5100R: South European)	
	3-861-729-11	MANUAL, INSTRUCTION (RUSSIAN, HUNGARIAN) (XR-C5103R)	
	3-861-730-11	MANUAL, INSTRUCTION, INSTALL (RUSSIAN, HUNGARIAN) (XR-C5103R)	
	3-861-973-11	MANUAL, INSTRUCTION, INSTALL (for RM-X4S) (ENGLISH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, ITALIAN, PORTUGUESE, POLISH, CZECH, GREEK, TURKISH) (XR-C5100R)	
	3-921-278-01	LABEL (DSPL) (for RM-X4S)	
	X-3373-412-1	CASE (PANEL) ASSY (for FRONT PANEL)	
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Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	3-916-161-31	FRAME ASSY (for RM-X4S)	
502	X-3370-077-1	SCREW ASSY (AE. KEY), FITTING	
503	1-775-543-11	CORD, GROUND	
504	1-782-092-11	CORD (WITH CONNECTOR) (ISO-P) (POWER)	
505	1-782-093-11	CORD (WITH CONNECTOR) (ISO-S) (SPEAKER)	
506	X-3373-432-1	BRACKET ASSY (for RM-X4S)	
507	1-465-459-21	ADAPTER, ANTENNA (XR-C5100R)	
508	1-777-989-41	CORD (WITH CONNECTOR) (AMP REM/ATT)